

One Tin Soldier – Foreword

The tale doesn't star Billy Jack. It is cautionary in nature. There are disasters and then there are disasters. The Northridge Earthquake didn't affect too many New Orleans residents. Hurricane Katrina didn't affect too many Los Angeles residents beyond raising the price of Folgers coffee. Hurricane Rita was more powerful than Katrina yet did much less damage. Ray Nagin got confused and thought he was Alexander Haig who said, "I'm in charge here." He even ordered firearms confiscated.

Preppers prepare for the just in case events that affects them directly. For every major event, suppliers experience runs and people who suddenly realize that they need it can't get it. Try to buy a portable generator if a hurricane is headed your way. Good luck. Prices for one year supplies of LTS foods have risen about 20% over the past five years. Suppliers don't always have what you need or want. Witness the thing with Mountain House a while back.

There were several instances during the Cold War when it almost became hot. In each case, someone held back and planet Earth got lucky. Some of the people responsible for preventing a GTW were actually punished for their actions. The new treaty with Russia is called the Strategic Arms Reduction Treaty or START. Most of the weapons are tactical weapons, not Strategic.

Yellowstone isn't the only caldera in the United States. It's one of two that show some amount of activity. We have an assortment of major and minor earthquake faults and even our own subduction zone, Cascadia. Two notable faults are the San Andreas and the New Madrid. The fact of the matter is that there are hundreds of faults in this country and other countries as well. Plus a lot of active or semi-active volcanoes.

A disaster means different things to different people. If it directly affects you, the term is generally disaster. If it affects others and not you, the term is generally tragedy. Some events are both, like September 11, 2001. In many ways, it's a matter of scale. Witness the death toll for World War Two, sixty million, ten times the number of victims of the Holocaust.

You are a select audience because most of those of you reading this are preppers. Prepping takes two things, time and money. In my opinion, there are probably more preppers with limited resources than unlimited funds. In this tale, you'll see both. I'm not good at writing action sequences and prefer to concentrate on the preparations.

As an author, I'm running out of steam. I have two incomplete works and incorporated portions into this story. Frankly, I'm running out of different ways to present the same message, Be Prepared. It seems like that's the Boy Scouts' motto. That doesn't make it any less appropriate. There's a thread here, 'What did you do to prep today?' Good question, what's your answer? I did nothing today, just because it wasn't a good day for me to prep.

One Tin Soldier – Chapter 1

It was in early 1965. I was getting a little pressure to reenlist and a lot of pressure to get out and go to college. Enlisting had been my way of thumbing my nose to the head of our family. The old man was, well, the old man. It was his way or the highway. I reckon I chose the highway. Now I had to choose whether to stay in or get out. There was a hint at a fourth stripe in a year, two max, if I kept my nose clean. It would take six more for the fifth stripe and no telling on the sixth stripe.

I looked at what I had and it became the basis for my decision. I had a M1911 and a M1903A3 I'd gotten from the DCM, now the CMP. The rifle had the barrel worked on, hot bluing applied and the bolt jeweled. It was stocked with a properly inlet Fajen stock with a free floating barrel and the receiver glass bedded. The original Weaver K-4, 6x38, fixed power scope adorned the rifle on Redfield mounts. The .45 had a new barrel for \$12.95 plus shipping. My other guns were a Winchester model 94 in .30-30 and a Ruger Mark II. My firearms all came from DCM, fellow airmen or Jack First.

I decided to stay in because three or four of the guys in my squadron were into quick draw. I went with one of them down to Alfonso's to pick up a new fast draw rig for his Colt SAA. He didn't say what it cost, but I think the reason I had to wait in the car was so I didn't find out.

Sixty four was a good year. I had been able to pay off the NRA and had my shiny new Life Member card. I also spent \$200 at the Bank of America every payday buying rolls of silver coins. When your paycheck is \$287 and change, that's no mean feat. At the end of the year, I had \$200x24 in silver coins. The Mint was going to cut the coins from 90% silver to 40% silver and one of the sharp guys in the unit said, buy silver coins, young man. I ended up with \$1,600 each of dimes, quarters and halves.

I bought three SAAs. The first was the SAA Calvary model with the 7½" barrel; the second was the SAA Artillery model with the 5½" barrel; and, the third and final was the gunfighter model SAA with the 4¾" barrel. All three bought in the space of one year, 1965. Went down to TJ and got the holsters I wanted, a double rig with 2 7½" holsters and a shoulder holster for the 4¾". However, to be really competitive, I need a rifle and a shotgun. Plus more money.

Assured that I wouldn't have to go to Nam, I started saving money. That's not to say I didn't buy dimes, quarters and halves, I still did that. I managed to acquire an additional \$1,200 of the older coins. The teller at the B of A thought I was nuts. It was essentially what I'd done the year before except I turned in most of what I bought for more. Packed away quite a bit of silver. Right at 300 pounds total. Also packed away about \$3,600 in cash. No promotion.

Between others getting in on the 90% silver bandwagon and the diminishing returns, I stopped that entirely for sixty six. Kept saving money but did splurge and buy a Remington 870 with a spare 20" barrel with rifle sights and improved cylinder choke. What I

wanted and couldn't get was a semi-auto M14. Since Uncle Curt had seen fit to equip the Air Force with the M16, and McNamara had issued an order to replace the M14s with M16s, I knew they'd come on the market. I just didn't know that it would be the seventies before the new Springfield Armory started to sell them.

No promotion in sixty six either and I kept my nose clean. The word was first promotion cycle in sixty seven. In sixty seven for want of something to do, I checked out the weight lifting program. I had that mandatory physical coming up and there was no way I could pass it. One of the guys, Mike, took pity on me and we worked on getting me in shape. Didn't lift a lot of weights, at first. I finally got the 4th stripe on the first cycle and passed my physical.

A couple of years back, the Air Force got confused and thought they were the Army. We had dress fatigues, complete with bloused trousers, neck scarf and the whole 9 yards. Lucky me, I passed my physical and Mike got me started lifting weights. Medium amounts of weight, nothing heavy. This was mostly amateur bodybuilding, I didn't want to have to buy new uniforms. I had a goal of weighing what I did when I finished phase II basic back in sixty two, 145. What I ended up with was the measurements from sixty two, but weighed closer to one fifty five.

We got a new Company Commander, Captain Wilson. He had sat down and read each enlisted man's file. I got called to his office and thought, "oh, oh."

"Sergeant, I've been reading your record. The first three years, you mostly got by. What happened in sixty four to turn you around?"

"Captain, I heard roundabout that the Mint was going to stop minting 90% silver coins and got into buying them up. I paid off my Life membership in the NRA and decided to reenlist because I didn't want to go back home. I started to get into Cowboy Action Shooting but couldn't find a coach gun or a lever action rifle in .45 Colt. I guess I lost interest. I got started doing some bodybuilding so I could pass that new physical."

"I see that you passed it without a problem."

"Yes sir. Wouldn't have passed it without some help. I'm continuing to work out so I can stay in shape. Got my promotion and that meant a lot."

"If you maintain your current achievement pattern and I remain your Commander, it's possible you might make Technical Sergeant with minimum time in grade."

"I'll work on it Sir, count on it. I'll be honest Sir, when I was notified to report to you, my first thought was 'Oh, oh'."

"Done anything I don't know about Sergeant?"

"Apparently not Sir. You probably have the size of my drawers in that file."

“We do try to follow enlisted personnel who are problems and those that stand out as achievers. Nobody’s perfect Sergeant, keep that in mind. Just because an Airman or NCO is a problem doesn’t mean they must remain so. When the change is accomplished on the person’s own, it means more. That’s all Sergeant, any questions?”

“No Sir. Thank you Sir.”

I reenlisted in sixty nine. In the fall cycle, I made Technical Sergeant. I went back to buying the change from the B of A because most people lost interest. It really was getting hard to find many 90% silver coins. I was up to buying \$300 a payday and reselling about \$275 that weren’t sixty four or earlier. But, there was a new series of coins minted in South Africa, the Krugerrand. The typical ratio of value between gold and silver varied around 50:1. They were very difficult to find, illegal in fact, but I started buying gold, one or two ounces at a time down in LA.

My third term of enlistment from sixty nine through seventy three wasn’t particularly notable. I served my time; I bought Krugerrands and still bought rolls of coins looking for the ever more elusive 90% silver coins.

By now, I was stationed in Elgin AFB. Edwards was hot, but dry. Elgin was hot and very wet. While I mostly manned a chair, I bought a second set of uniforms and changed after lunch in an effort to remain a recruitment poster Tech Sergeant.

Although I failed miserably at being a recruitment poster Sergeant, I did something right, I was promoted to Master Sergeant. I reenlisted one more time; I was on a career track now, during seventy three. I found the bodybuilding shop shortly after transferring and stayed in condition. I had found that it was easier to stay in condition than get into condition. Still single, I lived in the NCO barracks. At the end of this hitch, I’d have in sixteen and be close to the 50% pension.

Around seventy one, someone started making commercial versions of the M14. In fact it wasn’t someone but several someone’s. The one I heard about was some guy in Texas making what he called the M1A. By the time I tracked him down, circa seventy four, he’d sold out to a company in Illinois. I bought one of the standard models in seventy five. There were plenty of USGI magazines floating around since the war was over and I bought fifty new USGI magazines.

Ruger brought out the Mini-14 and I bought two; a blued model with the wood stock and an AC-556 with the 18” barrel and tricked out folding paratrooper stock, flashhider and a bayonet lug. Scouted around and decided the PMI magazines were probably the best and bought one 30 rounder to try out. It worked just fine and I added another 24. I bought two sets of ALICE gear, each with 4 magazine pouches, two canteens, a surplus WW II folding entrenching tool, a holster for the M1911 and 2 double magazine pouches.

I decided to get an apartment during seventy five because the silver and gold was a security concern and I was taking too much space in the NCO barracks armory. Springfield Armory had a Super Match but the barrel only had one turn in twelve and that wouldn't handle heavier bullets. Ammo wise, I could maybe handle one or two firefights since I hadn't begun to acquire large stocks of ammo. I had an assortment of hunting ammo for my '03 and both bullet weights for my model 94.

I was still saving money and buying Krugerrands. I'd given up on the silver coins because having over 300 pounds was enough. I had the silver coins stored in locked steamer trunks and the Krugerrands in a cheap fire safe. Nothing significant happened during my seventy three to seventy seven enlistment other than what I already mentioned and I reupped in seventy seven, going for the twenty.

I was giving retirement at twenty a lot of thought. I'd be 38 when I had my twenty. Many of the civilian contractors and GS employees put in anywhere from twenty to thirty, retired, began collecting retirement and then went to work for the military as a civilian, sometimes doing the same job they did when they were in. The civilian pay was higher than the military pay and, except for taxes the military retirement was pure gravy.

During my last hitch, several things changed. Springfield Armory brought out a Super Match with one turn in ten and I bought one. I added a good scope mount and a German scope plus a Harris bipod. I didn't need more magazines because I bought fifty when they were cheap and available. I did rent a climate controlled storage room and began to accumulate surplus ammunition. About half of my spare money went into surplus and the other half into Krugerrands. For the PMs, I strictly followed a policy of buy low and sell high with one exception, I never sold. For the ammo, the policy was buy it cheap and stack it deep.

I carefully rounded out my ammo supply, buying FMJ and HP 230gr .45ACP. I also bought .45 Colt full power rounds. Not that I'd need it, but I had a full case each of 150gr and 170gr .30-30. For my '03, I bought 1,000 rounds of 180gr soft point and 7,500 rounds of FMJ on strippers. I also had a case each of solid point and hollow point .22LR. I also ordered two Marlin rifles, an 1894 in .45 Colt and an 1895 in .45-70. I continued to buy ammo and Krugerrands up to '81.

I was pretty well set when I advised personnel that I'd be retiring with twenty. The next thing I knew, I was summoned to the Captain's office. Different Captain of course. I knew I hadn't done anything wrong and wasn't too concerned about the summons.

"Sergeant, I understand that you're putting in your retirement. From the looks of your file, I figured you for a thirty year man."

"Captain, it appears that Senior Master Sergeant is a no go and I figured to get on the gravy train like the others."

“You’re at the top of the list for next cycle, Sergeant. I can’t guarantee the promotion but I did give it my highest recommendation. You have to have a guaranteed retention period or you won’t get it. Four more years would get you to a 60% pension and at the full thirty the 75%.”

“What does it look like down the road for Chief Master Sergeant?”

“We have two positions opening in the future; one at thirty six months and the second at forty eight months. Reenlist for six when you have twenty four in and I know you’ll make Chief.”

“I think I’d be money ahead if I went the way I’m thinking.”

“That’s possible, but you’re category one for recall for the first five years of your retirement. Something happens and you’ll be back on active duty as an E-7 rather than as an E-8.”

I did think about it, long and hard. The Cold War wasn’t over but we hadn’t fought any major battles since Vietnam, yet. There didn’t appear to be anything looming and with my AFSC, 31390 Instrumentation Superintendent, I’d never be in combat. What the Hell, I reenlisted for four more. And, true to the discussion in the Captain’s office, I made Senior Master Sergeant the next promotion cycle. This enlistment ran from eighty one to eighty five.

The only thing I bought for my armory during that time was more ammo and a one of a kind set of holsters for my Peacemakers from Kirkpatrick Leather Co. I bought the crossdraw rig for my short guns and a Paladin rig from Alphonsos for the 7½” Colt SAA. I had them make the belt twice as wide with 48 cartridge loops for .45 Colt plus loops for ten rounds of .45-70 above the left holster. Darn near needed suspenders to support the weight.

I also had my eye on a couple of knives. I wanted a 24” Latin Machete for each of my ALICE packs and a Cold Steel Laredo Bowie. They had it in steel and in San-Mai with the latter costing more than double of the former. So, I went on a brief spending spree buying blades. The gun belt got the San-Mai Laredo Bowie and the ALICE harnesses each got a Gerber Mark II with the machete on the pack. Since both M1As had bayonet lugs, I picked up a pair of M-6 bayonets.

One thing led to another and I started looking at the M1As in terms of Load Bearing Equipment. I stuck with the ALICE gear, getting two pistol belts, holsters, dual pistol magazine pouches, harnesses, dual canteens WW II surplus entrenching tools and magazine pouches that each held two M1A magazines. I also bought a second M1911 good used, and replaced the barrel.

I began to check out suppressors for my M1As and Mini-14s. I contacted a firm in Phoenix, Arizona and got the low down on integral suppressors for the Mark II. They

would sell me a complete upper if I got the tax stamp and Florida was fairly friendly so I put in the application and sent the two hundred bucks. In the blink of an eye, like 7 months, I had the stamp and called Phoenix. They shipped to an affiliate near Eglin and I was on my way. I then applied for four more stamps, two for 7.62 caliber suppressors and two for 5.56 caliber suppressors.

This time around, it went a bit quicker and four months later all four rifles were equipped with screw on adapters. However, someone must have ratted me out; I got called into the new Commander's office.

"I understand you recently acquired five weapons suppressors Sergeant."

"Yes Sir, one for my Ruger Mark two and one each for my two Mini-14s and two M1As. Is there a problem Sir, I got the tax stamps."

"No problem exactly, Sergeant. Curiosity as to why you need a bunch of silencers."

"If you must know Sir, I'm also thinking about purchasing a pair of suppressors for my M1911s. I have the threaded barrels now and was just trying to decide on which brand I wanted."

"I understand, but you haven't explained why you need a bunch of silencers."

"Because I can legally own them, Sir? I live off base and my weapons are stored in a good gun safe so it's unlikely that anyone could get to them. We all have the right to keep and bear arms Sir, guaranteed by the Bill of Rights."

"Life member?"

"Yes Sir and a Patron member too. That's a higher level of membership in the NRA Sir. I'm working on getting an even higher level of membership."

"I can't say that I approve of you having suppressors, Sergeant. However, your record and evaluations since sixty four have shown you to be a good Airman and NCO. You easily pass the physical exams when you take them. The comments in your file indicate that should you reenlist for the final six years, you should be promoted. Was your former Commander aware of your activities?"

"I doubt it Sir; I only got into acquiring the suppressors over the course of the past year."

"I see. Thank you Sergeant that will be all."

"Does my acquiring suppressors have any bearing on possible future promotions, Sir?"

"That will depend on who your Commander is when you meet all of the criteria in terms of time in grade, tests scores and so forth."

“And if it’s you Sir?”

“The military uses silencers but infrequently. You have five and are considering purchasing two more. It is a concern.”

In other words, if it was up to the Captain, Senior Master Sergeant was the top of the line for me. I concluded that I’d give it up with twenty four in and take the 60% pension. I did go ahead and buy the suppressors for my M1911s and locked everything up in my gun safe.

I picked up a pamphlet to read in the barbershop off base and saw that it was by Kurt Saxon and was on the subject of Survivalism. It was a copy of ‘The Survivor’ and while I didn’t agree totally with what the guy was saying, the idea of having preparations for some unknown future event like TEOTWAWKI or TEOCAWKI made sense. I had the armory, for sure. I checked my kitchen cabinets when I got home and realized that I maybe had enough food for a month. I headed for the Commissary to stock up and add a second month of food. Thereafter when I went to the Commissary monthly, I double bought. I kept that up until I had a full year’s supply of food, much of it stored in boxes, but dated with the date of acquisition.

I also began buying more surplus 5.56, 7.62 and .45ACP. I had a chance to pick up a 9mm Browning Hi-Power from a Staff Sergeant under my command who needed some quick money, for what, he said not. He had 4 spare Browning magazines, a standard holster for a M1911 and magazine pouches for the extra magazines on the pistol belt. I helped him out and immediately ordered surplus FMJ and commercial HP ammo for the pistol. It took a while but I located a threaded barrel and went through the usual routine of getting the tax stamp and suppressor. That was back in eighty three, halfway through my enlistment.

It was about then that I picked up a copy of an old novel written by Pat Frank... ‘Alas, Babylon’. The novel was set in Florida and I began to rethink my plan to go to work there at Eglin. I tried to get my hands on every piece of information about Survivalists, Survivalism and any related subjects. At that time, there were two schools of thought on the subject, those for and those against, Survivalism. I concluded that should I choose to do it, it had better be on the sly. There were quite a few negative comments in the media about survivalists and militias.

Look, I just wanted to hang on until June of eighty five, get my twenty four in and try and find some safe place to live. I spent the next few months checking out various locations around the US and noting what type(s) of disasters might befall a resident. The east coast and Gulf experienced hurricanes and Nor’easters. The Midwest had tornados, floods, droughts and the New Madrid Seismic Zone. Plus all of the country north of approximately I-70 got blizzards and south of I-70 was hot and humid. West of the Rockies was a whole lot of hot and dry desert. California and Nevada had earthquakes and California north through Washington volcanoes. Seattle was near Cascadia and there was

no telling when it would slip. On top of those situations, there was Yellowstone which couldn't seem to make up its mind to erupt again or just shake some to keep everyone on their toes.

The missile silos were in Montana, North Dakota, Wyoming and elsewhere. At that time, there were 500 Minuteman III missiles plus 50 Peacekeeper missiles scheduled for deployment in eighty six at Warren. The Navy had 18 Ohio class SSBNs with 24 tubes apiece and 8 warheads per tube. They were beginning to remove the MM IIs from Whiteman AFB. No good place to go because for every pro there was a con.

I put in my papers in eighty five and didn't get called to the Commander's office for a change. The only significant thing I did in '86 was convert my Krugerrands to US gold Eagles, divided equally among the 4 denominations. One would have thought that the coin dealer I chose wouldn't have been unreasonable. Yeah, right. The newness had worn of the Krugerrands and although the Eagles were the same 22 carat gold, it cost me a 2% handling fee over and above the extra costs associated with the small denomination coins.

In the end, I moved back to my home state, Iowa, although nowhere near my home town. Having savings proved to be very necessary since jobs for Instrumentation specialists/technicians/supervisors were few and far between. I eventually got a job as an apprentice electrician in Ankeny.

Once I was reasonably certain that my job was secure, I bought a small bungalow in Cambridge. It had several things going for it: it was small, had a basement, it was a short commute to Ankeny and affordable. Between my earnings and military pension, it was within my means and I bought it using my GI Bill. I got a copy of the inspection so I knew what I needed to fix.

I did as much of the repair work as I could and hired a roofing contractor to put on the new roof. I asked about the photovoltaic panels and shingles and he said I'd do better to wait another ten years. The costs were still high and the efficiency of the panels low. So, I suggested going with a 20-year shingle, he countered with a 40-year shingle and said the panels could be mounted over the shingles. He had a deal going with a plumber to install solar water panels to reduce the fuel usage of the hot water heater so I did that.

When the internet finally became truly operational, I bought a Dell Desktop with a 56k modem and found an IP. It wasn't long before I did a search using the term Long Term Storage Food and hooked up with Walton Feed, Emergency Essentials, Lehman's and Canning Pantry. I suppose that's when I began taking preparedness more seriously. I had enough set aside for four one year deluxe supplies from Walton and some things from Emergency Essentials that Walton didn't have. A saying I'd picked up on the net was, "Beef, Beans, Bullets, Bullion and Bunker."

All but the bunker were either on hand or on order, to an extent. There was no shortage of guns or ammo. I'd need an alternate source of power and it wasn't going to be solar

for the moment. I also needed a shelter and the basement under the bungalow didn't lend itself well to meet that need. What I came up with was a detached double garage. I'd have room for my pickup and trailer; and with a basement underneath, a shelter. I selected a prefabricated 24'x24' garage with a side entrance.

I pulled the building permit and hired a contractor to put in a 28'x32' excavation 18' deep with the soil piled by the side until the project was finished. Step two was to install a sewage holding tank just below the floor level of the basement. Next, I got a plumber in and ran lines for the water and sewer under the soon to be poured slab and footings. He put the pipes low enough to avoid problems with the footings.

Next, I located a concrete contractor and showed him what I wanted. I got some strange looks concerning the two doors in the walls of the basement. Like they say, money talks and he did it my way, including the I-beams to support the overhead and adjustable support posts to support the I-beams. When I pointed out the second 8" concrete wall I wanted run from the door and around the corner for the depth of the garage five feet out from the inside wall he just shook his head.

To recap, I had a 24'x24'x9' (5,184ft³) basement under the garage with 8" thick walls, two door spaces and an outside tunnel leading from the main door around the back of the basement for the full length of the basement. The second door was intended to run to a concrete block generator room and it would allow access to a concrete culvert to be used as an escape exit. When all the concrete was in, I got the excavator back to dig the space for the generator room and another set of holes for a diesel tank, gasoline tank and propane tank. I bought used tanks, a 10,000 gallon diesel tank, a 2,000 gallon gasoline tank and a 3,300 gallon propane tank and had them installed in the holes.

While he was doing that, I put in the metal conduit for the outlets, switches and lights. I also moved in the used refrigerator and used freezer plus a new stacked washer/dryer pair. The freezer and refrigerator were on an extension cord. The package I bought from American Saferooms came in and I asked two of the guys from work to help me install the blast door. We got it in on a Saturday and I gave them a C note apiece for their help. The following weekend, I put in the generator room except for the overhead.

The generator I selected was a Cummins 12.5kw Quiet diesel. It and the 100amp ATS cost me as much as everything I'd done to that point excluding the equipment from American Safe Rooms. I ran pipes from the diesel and propane tanks and a pipe from the sewage holding tank to the septic line coming from the bungalow. It's probably easier at this point to note what was undone than what had been accomplished.

01. I need stairs in the tunnel on the backside of the garage.
02. I need to fill the space above the basement roof with 6' of fill.
03. I need to fill the propane tank.
04. I need to fill the diesel tank.
05. I need to fill the gasoline tank.
06. I need POLs and a bunch of filters for the generator.

07. I need to move everything from the house basement to the garage basement.
08. One or two complete outfits from Approved Gas Masks.
09. Hook up and plumb the Safe Cell with blast valves and ventilation pipes.
10. Figure out maximum shelter capacity given the volume of air exchanged (best guess, 6 max)
11. Alternate source of water.

I needed to know the answer to the tenth question in the worst way and found the answer at Utah Shelter Systems: *How often and for how long the air handling unit should be operated depends on the size of the shelter, the number of occupants, and the capacity of the unit. Assuming a family of six in a 3700 cubic foot shelter, they may wish to operate the air system for an hour every six hours or so to freshen the shelter atmosphere.*

This schedule is not very close to the level of desperation, but it does maintain good morale and comfort for shelter occupants. In order to maintain acceptable air quality in a shelter housing twenty to thirty occupants, the ventilator should be run for twenty minutes and then rested for twenty minutes. Fifty occupants is considered the absolute limit with a single VA-150 and would require continuous operation to support life. This assumes a steel or concrete shelter with un-insulated walls that will absorb body heat and keep temperatures under control. The combination of insulated walls, lots of occupants, and inadequate ventilation will cause temperatures to soar to intolerable levels in a short period of time. With this many people in a shelter, there will be a larger number of volunteers to operate the system (imagine the consequences of losing power with an electricity-dependent air handling unit under these conditions). The "ventilation officer" will also have the job of listening to the radio (perhaps on headphones) to stay informed about an ongoing situation. For this reason, we suggest that you position the radios near the ventilation unit.

Briefly, the Safe Cell was adequate for 6 people even if not run 24/7, which I intended to do should the need arise. The maximum capacity was 17 people. The system I bought would run on 110/220VAC or 12VDC.

The following weekend, I filled the blast door with concrete and got the generator down into the generator room.

Working very slowly, I lowered the generator until it was just inches above the stand I built out of 6"x6" posts and a triple layer of 3/4" plywood. I moved the stand just a tad and finished lowering the generator to about one inch above the stand. I pulled the rope that held it above the pickup when I pulled out and lowered it the rest of the way. I slid pieces of 1"x4" under each corner and lowered it the next 1/4". Next, I removed the ropes and went top side using a ladder and secured the block and tackle. Back down I went and using a pry bar, the corners were lifted one at a time and the blocks removed, allowing the generator to sit on its own short legs.

One Tin Soldier – Chapter 2

I threw a tarp over the generator and called it a day because I was tired.

I had a message on my answering machine when I got home from work Monday. When did I want the garage delivered? Call 1-555-555-5555 ASAP. The garage was prepaid and it was at my convenience. I reheated some of the leftover tuna casserole and had supper. I needed to add the 6' of soil on top of the basement overhead and pour the garage slab. So, I needed to find the piece of road plate I wanted to use to cover the generator room and have a ring welded on the top so it could be lowered. Then, I needed to get the excavator back to move the dirt. I called them back and suggested it would take 3 weeks for the spot to be ready. The following day, I ran new power lines from the transformer to the ATS and pulled the old lines from the transformer to the house panel. I used that wire to connect the ATS to the house panel.

The next day I asked the boss for Thursday and Friday off explaining I had a few things to do that I could only accomplish during working hours. I knew we had nothing pressing and was surprised when he hemmed and hawed before saying yes. If you're curious, POL is a military term for petroleum/oils/lubricants.

Thursday morning I found a piece of road plate at a junkyard. Considering what I had to pay for it, it was better than new. Since it was too heavy to haul in my pickup, I had to pay for delivery. But, I did talk them into welding on the lift ring, for a fee. They told me when it would be delivered and if I wanted it in a particular place, I'd best be there when they delivered. Otherwise, they'd just drop it at any open spot.

I rushed home and was waiting when they delivered the plate and it went down next to the hole I was going to lower it in. However, before attempting that, I cut the holes in the block in the generator room and added the extensions to the through the wall fittings and connected the intake and exhaust extensions for the generator. I went topside and lowered the plate in place, very, very carefully. Finally I connected the ventilation pipes to the intake and exhaust wall fittings and ran them to the surface. That hole was now ready to be filled.

I'd seen an 85 gallon pressurized water tank at Tractor Supply and ran down to Des Moines to pick one up. I also bought a 4 in one kitchen and a pair of pre-hung solid core doors for the generator room. On Friday, I went to the Merle Hay Sears and bought a chest freezer and a refrigerator only refrigerator for the bungalow. I had all of my purchases in place and running except for the doors by Friday night.

Saturday I installed the two pre-hung doors for the generator room. I also called a well driller and asked him to come by and discuss putting down a well. He asked if he could come right away so I gave him my address.

"I like to dowse. You aren't one of them that think dowsing is the Devil's work, are you?"

“Not particularly. As you can see, there are several open holes in my large backyard. That’s a secure storage room and those are the holes for the various tanks.”

“Secure storage room my aching butt. That’s a bomb shelter and you’re a prepper. Ok, you get my prepper’s discount if I put in your well.”

“Have at it.”

“I’ll get my coat hangers.”

He got his coat hangers and started walking the backyard. Three times he passed the same spot from different directions before he said, “Right here.”

“How deep?”

“Sixty feet give or take. I’ll put it in, including the pump and make it a turnkey project. Six hundred.”

“How soon?”

“You’ll have water by the middle of next week. Two inch pipe ok?”

“Whatever you recommend.”

“Ok, two inch pipe. You might get a trencher and run your water lines. Make them deep, eight foot minimum. You on sewer or septic?”

“Septic. This lot is outside the town limits. Don’t know why it didn’t have a well.”

“Might have in the past and it went bad. Previous owner might have figured city water was cheaper.”

“You know the language, you have preps too?”

“Bought into it. Back in the sixties a lot of Iowa residents put in shelters. The place we bought came with a nice shelter, 32’ wide by 48’ long. We’ve been stocking it for several years with LTS foods, radiation detection equipment, personal protective equipment and so on. Just bought one of those Barrett rifles.”

“I heard of them and thought it would be something that would be nice to have but it was expensive and relatively new on the market. There are cheaper .50 caliber rifles and I want a really accurate one if I do buy.”

“Sniper?”

“No, I’m a retired Air Force Instrumentation Supervisor. I’m working as an apprentice electrician these days.”

“You don’t say. Well, you want the well?”

“Yes, please.”

My pension check was directly deposited to my savings and I had more than enough to pay for the well. I finished installing the ventilation pipes for the Safe Cell, plumbed in the water and got the excavator back the following week to begin filling in the holes. He asked what I wanted to do with the extra soil and I told him I wasn’t sure. He offered to haul it off for free.

“I suppose you’re going to haul it for free and sell it to someone else?”

“I was, yes.”

“How about a discount on the refill?”

“Best I can do is ten percent.”

“Ok. You’ll be compacting the soil as you go?”

“You mean with a sheep foot roller?”

“That’s what I had in mind.”

“Over the tanks is no problem. If you cover that exit tunnel with a stout cover to keep the dirt out, I’ll compact the soil, but no discount.”

“Will you grade it level over the storage room so I can pour a slab?”

“I will do that. It will look like it did when I began excavating.”

“Deal.”

It was beginning to come together. I decided to get a carpenter to build wooden steps rather than buy steel steps. Which was fine until the carpenter I hired suggested 36” steel steps would cost about the same and he and a buddy would install them. The steps were in two sections. The upper section went down to a landing where they would install a steel door. The second section went from the inside landing to the tunnel floor and there was storage room under the stairs. The lower section of stairs were hinged at the landing which allowed them to be raised allowing full access to the space beneath the stairs. He gave me a quote and I checked my accounts before giving him the go ahead.

Two weeks later I began moving my supplies from the house basement to the shelter, keeping back only a two week supply of food in the house basement. While it may sound like it happened overnight, this process actually ran from eighty five to November ninety two. I had the propane and gasoline tanks filled and I was working on the diesel. I ordered 1,000 gallons of diesel at a time, when I accumulated enough money to pay for the load. Fuel prices in Iowa were, at this point in time, substantially below the national average price.

My trailer was parked in the garage in one stall and the pickup used the other stall. I bought a small compressor to refill tires and such. I had a small homemade workbench and a medium sized tool box with an assortment of mechanics tools. I also had a second toolbox with carpenter tools. Once I had the first load of diesel in the tank, I set up the generator to exercise monthly for 15 minutes.

My freezers were stocked with pork loins, bacon, hams and butter from Costco in West Des Moines. The remainder of the space held a beef I bought from the place that sold cut and wrapped Black Angus. Iowa had changed from sixty one when I graduated from high school to the present. For one thing, I was forty eight not eighteen. My favorite café, Maid Rite, were few and far between. Plus their Maid Rite sandwich was no longer fifteen cents. I had two freezers and neither was full.

Iowa still didn't allow NFA weapons so the Mark II never came out of the safe and the other suppressors never saw the light of day. I should have bought more select fire weapons when I had the chance because I couldn't buy them now. The safe was also in the shelter and it had been hard to move. I bought an AN/PVS-22 UNS nightscope for the Super Match even though it kept me from adding 5,000 gallons to the diesel tank. What can I say, I got it.

Nevertheless, two more loads and the diesel tank would be full. I had it stabilized with PRI-D and the gas with PRI-G. Although it was expensive, I had several 5 gallon cans of both with the ratio being 5 cans of D to one can of G. There were ten cans of D and two cans of G. The house heat was a wood/coal furnace and I filled the coal room every fall. The stove and hot water heater were natural gas until I converted to propane.

My pickup had seen better days; it was a 1960 Ford F-100. When I moved back to Iowa, I had a rust treatment applied and the body was still in good shape. The engine was the original and non-electronic. In fact, the only electronics were the radio and the CB. I took it in and had the motor and manual transmission (four in the floor) rebuilt. I had the body cleaned and a second coat of rust preventative applied. Finally, I got it painted in the original blue it was when it was new. I would have loved to convert it to a 4x4 but it was cost prohibitive. I did add an aftermarket second gas tank. I paid off the house ahead of time by double paying every other month. It was now free and clear.

I was disappointed in the election, but Bush has no one to blame except himself. The 'read my lips' comment came back to bite him on the butt. What do potato and tomato have in common? Ask Dan Quayle. I don't know much about this new guy, Clinton, but

he looks shifty to me. I had to replace my computer and the new one was several notches up from the first. My first was one of the first generation models and slower than molasses in January. I think this internet will take off pretty soon; maybe within the next three or four years.

I should note that the diesel tank is now full and I bought 4 cords of firewood for the fireplace in the living room. The bungalow is small enough I can almost heat it with the single fireplace. Not quite, but it was close. The guy just dumped the wood and I stacked it. When I was done I realized that I was missing almost a full cord. I called him up and told him I bought four full cords, not four pickup loads and I expected the rest of the firewood post haste. He tried to give me some lip but I had the invoice in my hand and it said four cords. Four cords is 512ft³ not 400ft³. He showed up 2 hours later and was going to just dump the load. I told him to stack it and if it was still short, he could go get the rest. He wasn't a happy camper when he came up a little short but he went home and brought back enough to fill in the missing 18ft³ plus four extra pieces so I'd quit complaining.

I suppose I'm remiss in putting a few personal details here in my diary. I was originally from Mason City and my name is Jason Jones, DOB May 1, 1943. I've never been married or even close. I did date some both when I was at Edwards and at Elgin. I like women, not men. I continued my prepping once I moved back to Iowa. After I got everything completed in December of ninety two, I concentrated on more LTS food and canning supplies. I had sampled all of the various dehydrated and freeze dried foods and replaced what I ate. Some of the things were almost better than fresh and I bought extra of those.

After studying the issue, I narrowed down my grain grinder choice to one of two models, the Country Living Mill and the Diamant 525. The latter model is imported from Poland and much more expensive. I selected the Diamant, just because, and purchased spare burrs. I added two sets of extra fine and all-purpose burrs and one set of extra course. It came with a pulley, making it easy to motorize. The manufacturer recommended a ½ to 1 HP motor, a 3" pulley that fits on the motor's shaft, and a ⅜" v-belt that is about 64" long. In the instruction brochure, it refers to a 3½" pulley and a 1400 RPM motor, which is common in Europe. In North America, however, the pulley should be 3" to adapt to Lehman's 1725 RPM motors. I bought the motor and the v-belt/shield/pulley kit to go with the grinder. I built a heavy table and mounted everything in place, down in the shelter.

For no reason in particular, when I worked on the inside of the shelter, I put in one bedroom and two bunk rooms, insulating the walls. A queen sized bed and two dressers went into the bedroom and I hung a closet bar for hangers. The bunk rooms each had a pair of bunk beds, two dressers and a closet rod. The washer was electric and the dryer propane. I went back to American Safe Rooms and got the air pump for the top of the Safe Cell to insure the dryer wouldn't cause a buildup of carbon monoxide. I also installed that overpressure valve.

I got a better TV for the bungalow and put the slightly used one in the shelter along with a VHS/DVD player. Then, I sat back and reviewed where I was in terms of being prepared. I realized that my biggest deficiency was in the area of communications. I started to check the outlets for various gear and made the decisions on what I wanted. It fell into categories, amateur radio, citizens band, business band and FRS/GMRS. I bought a pair of the FRS/GMRS radios at Radio Shack and my neighbor and I checked them out. Kids toys, at best. I decided to do the CBs first and bought two Galaxy DX2547 AM/SSB CB Base Radios, one for the house and one for the shelter. I also bought two Cobra 148GTL SSB radios and 2 Wilson mobile antennas (one set of spares). The base station antenna was shared and was a Starduster. There were sleeping accommodations for six so I bought six Cobra HH Roadtrip 40 channel portables with the Cobra Microtalk MA-EBM Earbud Microphones.

I got the exams and studied until I was positive I could pass the amateur exams. On successive weekends I passed the exams all the way up to extra class. However, I couldn't get the code and applied for the Technicians license from the FCC. Meanwhile, I shopped for amateur radios. I really liked the Kenwood TS-2000. However, in the end, I bought four Yaesu FT-897 and two power supplies. The FT-897-D can't be broad banded easily. I got the radios hooked up in the shelter and the house but couldn't turn them on because I had no antennas. What I really needed was a tower and that became my sole focus until it was up. Finally, I had a US Towers 55' collapsible fold over tower with three stand offs and a rotor.

I put in a Mosley Pro-57-B40 beam topped with a MFJ ten band vertical, the MFJ-1798. On one standoff was the Starduster, on a second was the business band vertical and on the third, the Diamond D-130-J Discone. I wasn't totally sure and bought a MFJ antenna tuner for the Discone as a just in case measure.

I had that all wrapped up before the bombing in Oklahoma City. I had taken to eating at a Maid Rite restaurant in Ankeny when I didn't feel like cooking. There was a waitress, maybe 42-44 and no wedding ring or diamond. We visited a few times when the restaurant wasn't busy. Her name was Kristin and she was divorced. She said they hadn't had children. Working in this type of restaurant really doesn't lend itself to going all out on makeup; still she was quite attractive.

"Jason, would you care to take in a movie on Saturday?"

"What's playing?"

"I'd like to see *Braveheart*."

"Mel Gibson?"

"Yes."

"Sure. Where and when do I pick you up?"

“Let me write down my address and phone number. Say one o’clock?”

“All I have is that old Ford pickup so you should dress accordingly.”

“Not much better than what I have, a Mercury Comet that was once red.”

It so happened that her Comet and my F-100 had the same engine. Her engine and manual transmission were also rebuilt. I had a full set of spare ignition parts that would work on either vehicle.

“So you’ve never been married?”

“No. I dated some but never got close to marrying. I had my hobbies and was doing my best to accumulate various things for after I got out of the Air Force. Some of what I did was and probably still is classified. Overall, it’s no secret; we collected data from tests on various systems for the engineers to evaluate.”

“What kind of hobbies?”

“Well, I like firearms. I both collect and shoot them but primarily modern firearms. I do have a small collection of 19th century type firearms including Colt revolvers and Marlin lever action rifles. They are all of recent manufacture. Are you familiar with the term prepper?”

“Not really.”

“A prepper is a person who prepares for an uncertain future. Originally preppers went by the term survivalist but it became a bad thing to be due to the media and most people of that ilk began to use the term prepper. I don’t know how the media came to believe that survivalists intend to overthrow the government, but that’s the current image.”

“But we do get the occasional winter blizzard and it pays to have a good pantry.”

“True, but my pantry is good for years not days or weeks.”

“How do you keep food that long? Doesn’t it go bad?”

“There are certain Long Term Storage foods. For example, wheat stored in a sealed bag with the oxygen removed and the bag stored in a sealed 6 gallon pail. If a person has a grain grinder and the wheat, they have flour. Other things are freeze dried or dehydrated, mostly the former.”

“That must be bulky.”

“A one year supply of food for one person only takes 33ft³. In a cube that’s ~3’ 8” in each dimension. I have eight years of LTS supplies for one person plus twelve months of short term supplies. Those are regular shelf stable groceries. Some things, like coffee and bath tissue I have in bulk because once they’re gone there might not be any more for a long time. The LTS foods only account for five percent of the space in my shelter.”

“Bomb shelter?”

“More like a storm shelter or fallout shelter but yes, a bomb shelter.”

“Could I see it sometime?”

“After I get to know you a little better, sure.”

“What do you want to know?”

“How do you feel about firearms? What hobbies do you have? Are you a good cook? Do you sew? Do you know how to can garden produce? Really, I don’t know where to start.”

“I was raised on a farm which actually does happen in a state like Iowa. I can’t remember how old I was when I first learned the safety rules and how to shoot. I started on a .22 rifle and graduated to a 20 gauge shotgun. My brother bought a Winchester model 70 in .30-06 to hunt out west and taught me to shoot it. I eventually graduated to a 12 gauge pump. However, I don’t own many guns at the moment.

“My main hobby is horse riding. There’s a stable on the southwest side of West Des Moines run by a guy named Baker. I go out there at least twice a month for the trail rides.

“I think I’m a good cook. At least I’ve never had any complaints. We grew a large garden and canned a lot each year. My father was partial to canned beef and when we butchered, part of the beef was brought home and canned.

“I suppose I’m an average seamstress. It’s more a matter of not having the time than the ability to sew. I took home economics in high school and my mother sewed. I learned from both school and her.”

“I’ve never ridden a horse.”

“Feel like going on a trail ride next Saturday? He gives lessons too.”

“If you are willing to go shooting the following weekend, sure.”

“We could go riding Saturday and shooting Sunday.”

“Ok. I’ll show you my preps on Sunday.”

“You don’t want to know about my first husband?”

“What’s to know? You’re no longer married for whatever reason. There’s no rush.”

“I caught the SOB in bed with my best friend. Goodbye husband and goodbye best friend. I was only twenty four at the time so I’ve been single for twenty years.”

The next weekend we went riding and shooting. I made arrangements with the guy running the place, for riding lessons. I seemed to have some innate fear of horses that they sensed. The main news was the bombing in Oklahoma City and the capture of Timothy McVeigh. It looked to me like about 40% of the building was missing. The speculation was that the bombing had been his attempt at making a Statement about Ruby Ridge and Waco. Not that some of his reported beliefs differed much from the beliefs of other Americans. We expressed our opinions at the ballot box, not with a truckload of ANNM (Ammonium Nitrate-Nitromethane) and Tovex.

I got my first riding lesson Wednesday after work. On the way home I stopped at Maid Rite and was surprised to find Kristin working. I waited until she was free and asked why she worked so many hours. She simply replied that the scheduled waitress couldn’t make it in. She asked what I had been doing and I mentioned the riding lesson.

“Want to do it again next Saturday?”

“Shooting on Sunday?”

“I’ll look forward to it. If I were to buy some firearms, what would you recommend?”

“Handgun would either be a Browning Hi-Power in 9mm or a M1911 in .45acp. I’m not a Glock fan although they’re good firearms. You will want either a Main Battle Rifle like the M1A, FAL or HK 91. The shotgun should probably be a 20” barrel with cylinder or improved cylinder choke. Remington 870 or the Mossberg 590A1 would be good choices. You should get a .22 rifle for small game.”

“You said you had Colts and Marlins; what about those?”

“Probably a Colt or a clone in .45 Colt with a 5½” barrel. You can get a Marlin 1894 in .45 Colt. I have those plus an 1895 in .45-70 Government. You make enough working in the restaurant to afford guns like that?”

“I do. But I have quite a bit in savings and if necessary could sell a portion of my gold and or silver.”

Gold and silver? We went riding on Saturday and when she showed up Sunday, she had a Browning Hi-Power, a P-14 .45acp, a standard M1A, a Mossberg 590A1, both Marlins, the (genuine) Colt revolver and a Marlin 39A.

“The remainder of the ammo I wanted is on order. I went with Brenneke slugs and 12-pellet Magnum Express 00 buckshot. The M1A ammo is German surplus. I have more of each on order and had to settle for two bricks of Remington solid point .22. He only had 100 rounds of .45-70. What do you think?”

“Did you get any rifle magazines?”

“Yes, 10 pre-ban 20 round magazines.”

“No scope for the MBR?”

“Not for the moment. I may upgrade it to a Super Match.”

“Would you like to take the tour?”

“Lead on.”

“Ok, here’s a key ring with duplicate keys. One is to the diesel pump, the second to the gasoline pump, the third is to the door in the stairway landing, the fourth to the padlock on the blast door and the last one to the gun safe. The safe has a combination dial like most safes but I drilled a hole through the knob and it’s locked in place with a long shackle keyed padlock.”

“It sounds like you have something to hide.”

“Actually, I do. I have eight suppressors and a select fire AC-556.”

“What, no hand grenades, LAW rockets or Raufoss?”

“No hand grenades or rockets. No Raufoss since I don’t have the M82 Barrett rifle.”

“Why no Barrett?”

“Cost and accuracy.”

One Tin Soldier – Chapter 3

Side note: Wiki reports the accuracy of the M82A1 as less than 1 MOA with match ammo and the M107 as 3 MOA. The Tac-50 is guaranteed at or below 0.5 MOA.

The Browning had adjustable sights and was soon shooting right on the money. The 39A had primitive sights and it went quickly. A tweak got the Mossberg ghost ring sights dialed in. The Colt had fixed sights. Finally, we sighted in the M1A at 200 meters using the iron sights. While we were sighting in the firearms, she got a cell phone call.

“Problem?”

“I’m afraid I’ll have to work tomorrow.”

“Can’t the boss fill in when something like this arises?”

“She does.”

“Then, why are you working?”

“I’m the boss. I hold the franchise for that restaurant and not only work a shift, but fill in for others when they can’t make their scheduled shift.”

“I’ll be damned, I never would have guessed. It’s time to go back and clean the guns.”

It was mostly silent as we cleaned the firearms other than my suggestions when required. After we finished, she asked if she could store the firearms in my gun safe.

“You don’t want to keep them at home?”

“I have one I carry. These are extra.”

“What’s your carry piece?”

“A PPK in .380.”

“You are a most unusual woman.”

“In what way?”

“You own the restaurant franchise so you must have some money and yet you drive a thirty year old car. The money thought is supported by the new firearms. You were raised on a farm and have the skills associated with being a well raised farm girl. What am I missing here?”

“Not much, just some details I left out. My ex wasn’t totally poor or extremely rich. His father on the other hand was very well off. He wanted the details and circumstances of why I filed for dissolution kept quiet. I would have never told anyone anyway but he didn’t want to take a chance. Daddy’s attorney contacted my attorney concerning a non-disclosure agreement. My attorney was as sharp as a tack and quick. He said he’d take the matter up with me but he knew how badly I’d been hurt and it wouldn’t be easy or cheap.

“I got forty thousand and attorney fees in the property settlement and my used car, the Comet. The non-disclosure cost Daddy four hundred and fifty grand. My lawyer got one fifty and I got three hundred. I socked the three hundred into blue chips and got a job working as a waitress. The earnings were reinvested into more of the stocks producing the dividends. It accumulated.”

“Good stocks?”

“Xerox, IBM, GM and a few others. I have a good broker. I sold some of it off when I acquired the franchise. I needed capital and I wanted some kind of iron clad investment, just in case. I bought some gold and silver Eagles assuming that they’d hold their value, regardless. They’re stored in a lock box at my bank. The franchise has been reasonably profitable and I’ve invested a fair share into additional precious metal holdings. I live on my waitress wages and tips. If I work overtime, I’m paid overtime the same as the rest. The franchise is held by a corporation that I own and none of the staff know I’m the owner.”

“So you’re well off?”

“Comfortable, not rich. I keep a portion in a money market checking account for whimsical moments. That’s where the money came from for the firearms and ammo. I don’t own a home. I lived in the same apartment for years. When I got the franchise, I moved to Ankeny, but as you’ve seen, I still live in an apartment. You don’t seem to be too bad off yourself.”

“My home is paid for and over the past few years I added the shelter and garage. I’m on septic and had a well put in. There are tanks for diesel, gasoline and propane buried in my rather large backyard. It took a while, but they’re full and stabilized. As I mentioned, I’m setting money aside to acquire a large caliber sniper rifle when I can find one I can afford that consistently shoots sub-MOA. I have my military pension and my wages as an electrician. I’m fairly frugal when it comes right down to it. Silas Marner had nothing on me.”

“My brothers bought the farm when mom and dad retired. I assume the will divides their estate equally among us. I’m in no hurry to get that share. Farming is a tough way to make a living and I wanted no part of that although I was offered the opportunity to buy a share.”

“I’m getting hungry, how about we go out for something to eat?”

“I’m not really dressed for anything fancy.”

“That Italian restaurant we went to before doesn’t have a dress code.”

“Chuck’s? That sounds good.”

We started dating on a fairly regular basis and one thing led to another. I got to thinking that Kristin was a person I could spend the rest of my life with. I eventually brought up the subject of marriage.

“I probably have the same feelings for you Jason. I don’t know as I want to get married a second time. If you’re offering, I’d be happy to move to Cambridge and share the bungalow.”

“What would people think?”

“This is the mid-nineties, not the mid-fifties; who cares what people might think? It would make it simpler for each of us considering what we’ve accumulated over the years. If we did marry, there would have to be a prenuptial agreement anyway to protect both of our assets. Why don’t we try it my way first and if we need to formalize it, we can do that later. We won’t be having any children. I developed endometriosis and had radical surgical treatment due to chronic disabling pelvic pain. I do have to take hormones to maintain my pain free condition.”

“Oh, I just thought that you had experienced early menopause.”

“I did, all in one fell swoop.”

“Are you sure?”

“I’m willing to give it a shot, if you are.”

Kristin didn’t have a lot of possessions. We blended what we had, using the best of both and storing the rest in the garage loft. The only thing she insisted we add was a laundry pair in the house. Not long after she moved in, my hot water heater sprung a leak and I replaced it, moving from a 40 gallon unit to a fifty gallon unit with a quick recovery time. It was supposed to be a top brand, Bradford-White.

Our arrangement had its benefits; there was a certain amount of anonymity when it came to our business affairs. She bought a safe for the restaurant but it somehow ended up in the shelter and was used to hold our separately labeled gold and silver. She watched the market closer than I did and over the course of the next six years, into oh

one, we accumulated a fair amount of additional precious metal. We also accumulated an inordinate amount of ammunition.

Two thousand and one was notable for three reasons, perhaps four or five. First, the reviews of the McMillan Tac-50 rifle and the company's 0.5MOA guarantee led me to finally buy a .50 caliber rifle. They brought the rifle out the year before. Second, Kristin got an offer for the franchise that was too good to refuse and she sold out in March. Eighty percent of the proceeds went into gold and silver and the remainder in her money market account. Third, September eleventh occurred and America got a wakeup call. Fourth, George W. Bush ordered the invasion of Afghanistan. They also executed Timothy McVeigh in 2001 for the Oklahoma City bombing.

We picked up some lumber and built extensive shelving in the basement of the house. Kristin contacted someone she knew and purchased enough quarts, pints and jelly jars wholesale to completely fill those shelves and additional shelving in the shelter. We bought a new Troy-Bilt rototiller, the largest model they had and put in a huge garden. We added a patio behind the bungalow and plumbed it for propane, water and septic. A work counter was installed and it held a small electric hot water heater with a power switch. Kristin said she'd do the canning there to avoid heating the house. She had a carpenter come out and install a roof and framing for either screens or windows. Both were full height and the windows were Plexiglas and it had a combination screen door. We planned to put up the screens in the spring and the windows in the fall, after canning season.

One other thing comes to mind and it's unrelated to the current events. I kept up the lessons at Baker's until I was an accomplished rider. I wouldn't be entering any rodeos, but I was very comfortable on a horse. Kristin bought two four year old gelded saddle horses and boarded them at her brothers' farm out by Adel in ninety eight. The tack was rather plain but of good quality. She included saddlebags, pommel bags and a lariat. We bought rain slickers and fleece lined drover coats. I bought some western shirts to go with my jeans and got a good pair of western boots for riding. Our hats were brown Stetsons, same color but slightly different styles. We also bought Stetson straw hats for the summer months.

I bought a fair amount of gold and silver over the course of 2001; in addition to that Kristin bought, and added it to my individual stock. Gold was 'cheap' in 2001. Kristin finally bought a Springfield Armory Super Match rifle and went all out on a scope. It was a Carl Zeiss Victory Diavari 6-24x72mm T* FL. I got jealous and asked her to order one for me. We choose the illuminated Rapid Z 5 reticules. With Match ammo, the rifles were now tack drivers out to 1,000 meters, assuming we gauged the wind right. I stored my previous scope.

I added an AN/PVS-27 to the Tac-50. When I bought the rifle package, I upgraded the scope to the Night Force NXS 12-42x56mm Mil Dot scope and added the McCann Night Vision Rail Mount. The rifle package came with a total of two magazines and I

bought three extra for a total of five. I selected the Hornady 750gr A-MAX Match ammo and bought 200 rounds initially. That stuff is expensive.

We upgraded the computer to a Pentium III with a gigabyte of memory in December and got the Windows XP Professional operating system. We were too far to get ADSL from the phone company and got high speed internet from our cable provider.

We were now sitting on ~10,000 rounds of ammo per rifle, 4,000 rounds per shotgun and 3,000 rounds per handgun. About one half of the rifle ammo was Match grade. That, of course, excludes the Tac-50. I was buying either one extra magazine or 50 rounds of ammo per month. I was shooting for a total of eleven magazines and all the .50 ammo we could afford. Buy it cheap and stack it deep.

I helped with the canning because there was simply too much work for Kristin to do by herself. The only jelly she could make was strawberry preserves. We discussed it and decided to have the property fenced with 6' high chain link fence and three gates; vehicle gates front and back plus one pedestrian gate in the front. The fencing company offered a discount if we added the barbed wire top at the same time. The discount only applied to barbed wire and supports, but we decided, why not. It didn't take all that long to get the fence in and Kristin checked with a nursery about having thorny blackberries planted inside the fence except for the three gates. The price must have been right because the nursery planted the blackberries and even ran sprinkler lines.

"Maybe we don't need as large a garden next year. We have enough canned food for two years."

"I was thinking about cutting it back to about $\frac{1}{2}$ to $\frac{2}{3}$ this year. You're just going to have to continue to eat commercial blackberry preserves until next year. From what the nursery guy said, I think I'll use pint jars. If we were going to have this large a garden again, I think I might buy a second pressure canner."

"How did you come out on jars?"

"I had enough, barely. My local wholesale source won't sell them for wholesale unless I buy a gross of cases of jars. Is there room in the garage loft?"

"Are you going to get a second large order?"

"If we have the space, I will. I'm going to get a few cases of lids while I'm at it. How do you like the dill pickles?"

"They're good. Do you have a recipe for bread and butter pickles?"

"Mom does. I'll get that and her sweet pickle recipe. Have you been watching the gold prices?"

"I just check once in a while. Up or down?"

"They're holding. I could be wrong but I think the market is due for a slow upswing. Now's the time to buy."

"Considering how much we already have, I'd prefer to concentrate on getting our ammo supply up to the desired levels."

"We have a lot of ammo."

"Not .50 caliber. I started with 200 rounds and have added 50 rounds of ammo or one extra magazine each month. My personal goal is 5,000 rounds. I found that source charging \$59 for ten rounds plus shipping."

"What brand?"

"Hornady A-MAX 750gr Match ammo."

"I figured you would have found a source for the Mk 211 MP by now."

"I wouldn't have any idea where to look."

"Do you want some?"

"Does a man dying of thirst in the Sahara want water?"

"I may know somebody. If I did get you some, you'd have to put it up until times get desperate."

"There you go, one full can of ammo."

"What did that run?"

"Five per round...six hundred for the can."

"I don't know what to say."

"Thank you will suffice."

"Of course thank you. Can you get more?"

"Maybe one can per quarter. At least that's what Charlie said."

"Who's Charlie?"

“A supply Sergeant. He said they use about 80 rounds a month. He can record a usage of 120 and come up with an unaccounted for can about once a quarter.”

“I’ll pay for it.”

“You bet you will. Besides, it’s cheaper than that A-MAX you’ve been buying.”

“Not by much, only a buck a round difference.”

“I’ll let you know when to have the six hundred. Mind if I ask you a question? It’s not that important but I’ve been curious since I met you.”

“Ask away.”

“You got out of the Air Force about fifteen years ago, right?”

“Yes, June of eighty five.”

“Why do you get up every morning and do calisthenics?”

“Oh man, that goes way back. I went in during June of sixty one. At the time, the physical conditioning wasn’t emphasized and I let myself go to pot and picked up a bit of a gut. In sixty four, they announced physical standards that had to be met. I got with a guy who worked with me to get me in condition. I even started lifting weights. The bottom line was I discovered that it was easier to stay in condition than get into condition. It became a habit and when I got out, I just kept it up.”

“Why did you get out? Couldn’t you have stayed until thirty years?”

“That was mostly a political decision. We had this CO who called me into his office and started grilling me over some of my weapons purchases, the suppressors. I concluded that I’d never make Chief Master Sergeant even if I stayed in the extra six years. I guess you could say I tried to cut my losses.”

“You are in pretty good physical condition for a man who is 59.”

“I try. I don’t care for running and have never jogged. I do have that shortcoming among others.”

“It’s a good way to burn off fat.”

“So I’ve heard.”

“I’ll jog with you. We can start off easy and slowly increase it. Probably be good for your heart too. Why did you stop lifting weights?”

“I didn’t have a set of my own and never was into bodybuilding like some the guys with a nineteen inch collar. It was just to maintain a high level of muscle tone. I suppose I should get a barbell and dumbbell set and do it again.”

“Only if you want to, Jason. You’re in good condition.”

“But I could be in better condition. I’ll get the money set aside for the next can of Mk 211 and see about the weight sets. By the way, I found an interesting website. It’s called Frugal Squirrel’s. I made a book mark in favorites. Check it out sometime.”

Nothing of note happened during 2002. I continued to buy .50BMG ammo and got the weight set. I had to ease into lifting weights because it had been a while. It got more interesting in November of 2002 when the UN Security Council passed Resolution 1441. Despite the inability of the UN Inspectors and the Iraqi Study Group, no weapons of mass destruction were found in Iraq either before or after the March 20, 2003 invasion by the US and the UK. On 1May03, my sixtieth birthday, Bush made a speech from the USS Abraham Lincoln, CVN-72 where he announced ‘Mission Accomplished’.

We did buy the extra order of jars at wholesale. Most were stored in the garage loft and what wouldn’t fit went into the bungalow basement. Kristin also bought a new kind of lid, the Tattler reusable lid. The manufacturer guaranteed the lid to never wear out. The lid was 2 pieces, a plastic lid and a rubber ring. I’m not sure if the guarantee extended to the rubber rings. No matter, she stored the extra rings in seal-a-meal bags. We shall see what we shall see.

The mission wasn’t quite accomplished and they didn’t catch Saddam until 13Dec03. They eventually hung him on 30Dec06. The continuing wars in Afghanistan and Iraq were an anchor around the neck of potential Republican candidates and on November 4, 2008, the US elected its first black president, Barack Hussein Obama II. In the meantime, troops had been surged in Iraq and that situation was more or less under control. However, the Taliban and al-Qaeda upped the ante in Afghanistan and our new, anti-war president was forced to surge troops in Afghanistan.

The new president got an economic stimulus passed and a year later, National Healthcare. It’s hard to say what he’s going to screw up next, but I’m certain he has it on his agenda. He obviously plans on turning the US into a socialist country. I never thought I’d live to see the day. Recently, I began to record my diary in Word, in book form.

As far as the .50BMG ammo, I ended up with 36 cans before Charlie disappeared. On top of that, I had a lot of the A-MAX, 6,000 rounds. But, I was no longer 18 and Kristin was no longer 44. Over the past 7 years, we bought the 2½ acres adjoining my property. We had a pre-fab barn erected and moved the two geldings from her brothers’ farm to our little acreage. We had a separate well put in by the same well driller.

I retired at 65½ and mostly spend my time helping out around home. There is not a lot to do, feed the horses, muck the stalls, grow the garden and help can. I got to looking around the backyard with my tape measure in hand and decided we had a spot for a nice medium sized hobby greenhouse. I'd picked up the name Texas Greenhouses from a PAW story and checked them out. I determined that their AC-1700 which was 17'5" wide by 32' long would just fit. Kristin said to get the full glass to ground model in the bronze color.

You'd be surprised how quickly they can get a greenhouse shipped and erected during their 'off season'. We added the automatic vent and a propane fueled heater so we could hopefully keep it the same temperature year round. It turned out to be a lot of back breaking work after it was up and the carpenter she hired got the tables in. She found some wooden 'grow pans' about 12" deep, give or take, 36" long and 24" wide. I filled them with a mix of soil, potting mix and vermiculite. I got to looking at one of the pans and decided they were nothing more than 1"x12"s cut to length and attached to ½" plywood.

"Don't buy any more of those grow pans, it will be cheaper for me to make them. They're nothing but ½" plywood and 1"x12"s with holes in the plywood for drainage and glue and screws to hold them together."

"I know Jason; that's why I only bought twelve. How many are ready for planting?"

"All twelve."

"Good, I'll plant those and you can build me twenty-four more to start with."

"Why don't I just build all we have table space for?"

"Fill them as you go?"

"Might be easier on my back."

"Good. I'll pick up more vermiculite and potting soil. You can continue to mix that with the soil in your wheelbarrow and fill the pots."

"Maybe we should compost that horse manure and use it as a natural fertilizer."

"I'll check it out on the net."

"As much as I hate to admit it, I'm starting to feel my age. I got the material for the boxes and built five. They're 12" deep, 24" wide and 36" long, the same as the others except the fifth has a pieced together bottom. I should be able to use the last small squares for something, maybe smaller boxes. I've got to get them filled so you can plant. I'll check the internet after I get that done."

The tables were 36" wide by 8' long. There was a 2' space at the end of each row and space between the tables of about 18", give or take. There were 3 rows of tables for a total of an even dozen. Each table would hold four grow pans meaning we could fill forty eight at once. Figure 6 heads of cabbage or lettuce or four rows of carrots per. One or two tomato plants depending on variety. Potatoes were over planted in the regular garden and stored mostly in the shelter where we could keep it around 40°. There were certain crops we reserved for the outdoor garden like corn, melons, potatoes, onions and garlic.

"I think I'll try my hand at growing two trays of herbs."

"Which ones?"

"Basil, dill, summer savory, mint, parsley, sage, rosemary, thyme and tarragon to begin with."

"Simon and Garfunkel?"

"What?"

"Parsley, sage, rosemary and thyme."

"That was, uh what, Scarborough Fair?"

"Yeah. It started off with, *Are you goin' to Scarborough Fair? Parsley, sage, rosemary, and thyme. Remember me to one who lives there, she once was a true love of mine.* You've been keeping the food inventory. How do we stand at the moment?"

"Two years of canned garden produce. One freezer is full. The one year of short term supplies can't be short more than a week or two. Two large bags of onions. Fourteen bags of potatoes. The two years of garden produce include 55 jars of pasta sauce. The LTS stuff is 6 years for two and the extras you like to include in our regular diet. Why, something bothering you?"

"Yes and no. Something is eating at me but I can't pin it down. The stock markets are up and down like a roller coaster. Gold traded for over twelve hundred an ounce today on the New York Spot Market. Kim Jung Il is visiting China and President Mahmoud Ahmadinejad still trying to drum up support for a reduction of sanctions because of their nuclear activities."

"It will come to you."

"I just hope you mean I'll figure it out as opposed to a missile flying over the Arctic."

"You were at Edwards during the Cuban Missile Crisis?"

“Yes I was.”

“Did you know Gary Ott?”

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“I knew him. He mostly had his nose stuck in a bottle of Olympia beer. I think that event spooked him more than a little, he didn’t drink for almost two weeks. In some ways, we had quite a bit in common. He was from Charles City and enlisted to get away from his father like I did. He got an early out to go to college at ISU.”

“You know that he’s one of the Patriot Fiction authors at Frugal’s don’t you?”

“Which one is he?”

“Tired Old Man.”

“TOM? You can’t be serious. I wonder when he moved back to California.”

“Eighty two according to something he said in one of his stories.”

“Still a drunk?”

“I think he cleaned up through AA.”

“Good for him. Doesn’t mean he wasn’t a horse’s hind end, but good for him. What did he end up doing?”

“Got a BA and an MBA. Worked for the Department of Revenue for 19 years and then resigned. He’s been disabled for several years.”

“Seems to know his stuff on most survival related issues. I like those links he sometimes includes in his stories. Plus we both have the same taste in music.”

“I prefer Jerry D. Young. I figure he’s rich because I’ve looked up some of the equipment he discusses in his stories. Pricey stuff.”

“I looked some of it up too. It’s pricey but of the highest quality. I’m not so sure I agree with his preference for the PTR-91 over the M1A. However, I checked out the AUG and they’re top notch. His hands must be larger because he favors the Glock 21 or P-14 over the single stack M1911s. I’ll give him one thing; he is partial to Cold Steel knives.”

“Are they the best?”

“What’s best is mostly a personal choice. There are some of their 24” machetes on the ALICE packs. That knife on my gun belt is a San Mai Laredo Bowie, also from Cold Steel. The assorted bayonets are mostly from Ontario Knives and the daggers are Gerber Mk 2 fighting knives. Randall made knives are the best in my opinion.”

“Come on, I’ll help you with filling those boxes.”

“Sure. What’s for supper?”

“Would you mind terribly if we went to Maid Rite?”

“Not at all. Guess we got out of the habit when you sold out.”

After we filled the boxes, she began planting the seeds. She said I had time to do some checking on the internet. I went to the link describing composting horse manure and printed it out. I went to Canning Pantry and Lehman’s and checked out the grain rollers and ordered one. Finally, I went to Hall’s Arkansas Oilstones and ordered three natural stones. I washed up and was waiting for her when she came in from the greenhouse.

“Give me five minutes.”

“Take as long as you need.”

“Ready?”

“Ready.”

“I don’t know if I want the tenderloin or the Maid Rite.”

“As hungry as I am, I may get the Tenderloin basket with a Maid Rite on the side.”

“That’s a lot of food for one sitting. Tell you what, I’ll have a word with the guy who bought me out and get a box of Maid Rite meat and one of Tenderloins. If he’s not there, maybe the shift super will sell them to me.”

“It would be nice to be able to have a Maid Rite without driving to Ankeny.”

“You should have said something Jason. It’s usually no problem for a former franchisee to get a box of the meat or tenderloins although it is against policy.”

“While I was waiting on you, I ordered a grain roller and three natural Arkansas stones. I only had the one and it’s seen better days. With the three I bought, I’ll get every knife we have sharp enough to shave with.”

“Fat lot of good that’ll do me, I don’t shave.”

“I guess I should have just said razor sharp.”

“I knew what you meant, lighten up. Are you going to do all of them including the bayonets?”

“I haven’t thought that far ahead.”

“I saw a knife on the internet I wouldn’t mind having. Maybe for Christmas?”

“What was it?”

“A Spiderco Harpy.”

“I know the knife. Wicked.”

“How about you? Anything you’d like to have?”

“Not really. I have all the boy toys I’ll ever need. We even have the smoke grenades you found at Ammunition to Go and the special 12 gauge and .45acp ammo. Two colors of flares and shot shells for the .45acp and flares for the shotguns. There was a time when I was engrossed in the Out of the Ashes book series. I have the Thunder Lizard but the Chicago Typewriter is too expensive to buy and too expensive to shoot.”

“A Thompson submachine gun?”

“Yeah. Can’t own one in Iowa anyway.”

“But you have the AC-556.”

“I lived in Florida when I got it and didn’t send a change of address to the ATF.”

“Why did you get the folding stock?”

“It’s compact enough to carry in a large backpack with the stock folded. I like it because it is semi-auto, 3 round burst and full auto. You don’t need full auto or 3 round burst often, but in those situations where it’s appropriate, you’re glad to have it.”

“What situations would those be?”

“If you’re conducting an ambush or being ambushed. At least you can lay down suppressive fire and make good your escape.”

We had our meal and Kristin disappeared for a few minutes. She paid for the meal and I noticed it ran more than a single twenty.

“You must have gotten the goods. The Maid Rite is good but two meals don’t cost over twenty dollars.”

“I got two boxes of each. They always keep a little in reserve and will be refilling their stocks on Monday. It’s probably a good thing Julie was working rather than the new franchise owner. She and I go way back. She said the new owner strictly follows company guidelines and wouldn’t have sold me any.”

“Is there room in the freezer?”

“If not, I’ll take out some of the frozen jugs of water.”

Another day in the life, routine, boring. I caught the news the next morning on the radio and switched on the TV when I heard about Yellowstone. I caught the tail end of an interview with Jake Lowenstern. About all I heard was his statement that the swarm was ‘most unusual’. I assumed they replay the clip during the next news hour and pulled up the few files I had on Yellowstone on my computer. We had breakfast sitting in front of the TV so we could catch the interview when it was replayed.

“I see what you mean Jason; this could be a problem if it let loose.”

“For sure we’re in the area covered by the Lava Creek ash bed and I think probably the Huckleberry Ridge ash bed. It would just be our bad luck if it does erupt and the eruption was larger than Huckleberry Ridge. That one put out 2,450km³ according to the map in that one file. Supposedly it’s forty thousand years overdue based on the average interval.”

“I’m not going to worry about it since there’s nothing we can do to affect whether or not it happens. I have a question. Can we add grow lights to the greenhouse?”

“We can. However, if we’re on grow lights, I doubt we’ll have enough electricity. That 12.5kw generator we have isn’t big enough for the additional load.”

“What can we do about that?”

“I suppose we could replace it with a larger generator or add a second of the same model and synch them. The other way to go would be to just use the new one to power the greenhouse grow lights.”

“Get your hat, we’re going shopping.”

“Let me call the excavator and get him started on digging down to the overhead.”

“Let’s go.”

“What did he say?”

“He’ll start within an hour. The way I set this up was with a road plate as an overhead. It had a large ring welded on it and we can lift it out with a block and tackle.”

“Hogwash. We’ll hire a crane to remove the plate, lower the new generator and replace the plate.”

“If we’re going to do that, we’ll need to get a welder to build a new support frame.”

“That sounds like a lot of work. Wouldn’t it be easier to put in a bigger generator?”

“Well, we could. But, it doesn’t make any sense. The QD12.5 generates 100 amps. To get to 200 amps of single phase, we’re looking at a larger, louder, fuel hog compared to adding a second QD12.5. If we can’t synch them, we’ll just use the one for the greenhouse.”

The dealer didn’t have a QD12.5 on hand or a QD10. We ended up at another vendor and brought home a Kohler 40REOZJB. It had just enough extra power, a total of 150 amps, to do the job. We had to buy a 200 amp ATS, a new electrical panel and all new filters but we’d have the power we’d need. When we arrived back in Cambridge, the excavator was shoveling the last of the soil into the bucket. He asked why we needed it uncovered and I briefly explained, omitting any reference to Yellowstone. He said to get the block and tackle and we could raise the plate up near the surface and he’d lift it the remaining distance and set it beside the hole. If we could call him within the next two days, he’d be available to lower anything and everything, but the day after he and his wife were headed to Florida. Nobody in their right mind goes to Florida in August.

I turned off the diesel line and disconnected it and the intake and exhaust from the QD12.5. The block and tackle was used to remove the generator and stand in a single lift. Then, he lowered the Kohler into place with me guiding it. OSHA would have never approved. Next came the overhead and finally the soil. Meanwhile, I had the fuel connected using a wire braided hose and managed to get the intake and exhaust adapted to the lines. The QD12.5 was stored in the garage.

The excavator finished backfilling the hole and made out an invoice. Kristin gave him a check and we began to haul the filters down to the shelter. We got back in the pickup and went after 4 drums of oil.

“Any more spending is going to have to come out of your checking account Jason, I’m tapped out.”

Figuring 7 pounds per gallon, a 55 gallon drum of oil weighs 385 pounds. Call it 400 to include the drum. The F-100 1960 Ford pickup is a half-ton. Can you imagine what it looked like with 1,600 pounds of oil in the back?

“I’ll finish it up tomorrow. We need the fixtures, bulbs and more conduit, flex and wire. I’ll put a string of lights end to end over each row so we’ll need 24 fixtures and maybe 30’ of conduit plus a switch box and heavy duty switch.”

“Why don’t you put each row on a separate switch?”

“If that’s what you’d prefer, fine.”

“What do you want for supper?”

“Hot pizza and a cold beer.”

“In or out?”

“Let’s go out, it’s not a DiGiorno night and we don’t have any beer.”

“We don’t have any DiGiorno either. I’ll have to fix both tomorrow after we go shopping.”

“For the lighting?”

“No, I’m taking the trailer and going to Costco and Sam’s Club first. I’ll get some beer and DiGiorno at Hy-Vee and then we’ll stop and pick up the electrical supplies on the way home. You might want to check the freezers and see how much room we have.”

“We have room for a box of loins, a case of hams, 60 pounds of bacon, 60 pounds of butter and a beef before we have to pull ice jugs. They were emptier than I thought. We can use my checkbook; I’m in pretty fair shape money wise. I’ll put the two Igloo coolers in the trailer with a jug of ice in each. While I’m doing that, could you call the Black Angus place and put a rush on a side of beef?”

“Extra boneless to use all the tallow?”

“Yes. Tell them that we want 10% ground sirloin in one pound packages. That should use up all of the trimmings. Might take a box or two of boneless, but tell them to use all they need.”

I hooked up the trailer and pulled 2 ice jugs from the shelter freezer, locking it up on my way back up. I had added my 1911 in a Galco Miami Classic rig and slipped my small boot knife in my right boot. I notice that Kristin had her Galco purse so she was armed too.

At Costco, she loaded a trolley with bath tissue and I loaded one with 60 cans of coffee and a list of spices we were low on. We arrived at the checkout together and I told him we were together. He rang us both up and I wrote the first check. The purchases were stored in the trailer and we went back for the refrigerated goods. We had to ask to get that many hams and they were pulled from a walk-in cooler. While they were at it, I asked them to pull enough butter so we could get 60 pounds plus a full box of loins. I topped the load with two flats of canned mushrooms.

“That’s a lot of meat, expecting trouble?”

“Could be; have you been following the news?”

“Yellowstone? They have swarms all the time.”

“Yeah, well, we’re stocking the freezer.”

We also got twelve 6-pound cans of Crisco, several boxes of tea bags, salt, pepper and sugar. Kristin left me to guard her cart and went for another. She filled it with the various mixes for cookies, muffins, pancake mix and Aunt Jemima Syrup two packs. The last item we squeezed into a third cart was several gallons of vegetable oil and a 100 pound bag of flour. After we had that paid for and loaded into the trailer, we headed for the nearest Sam’s Club. We stocked up on several varieties of pasta and Bunn coffee filters, among other things.

We went into the liquor store and got a mixed case of Liquor including Jack Black, Jose Cuervo, Absolute and Sapphire gin. Next, we stopped at Hy-Vee and got 6 cases of beer, four dozen DiGiorno pizzas, six cases of Coke and an assortment of mixes. I like Jack and Squirt so I added two cases of Squirt. Normally Costco is cheaper on Coke than the grocery stores but Hy-Vee had it on sale.

The last stop was the electrical supply house and I gave Mel the list of things I wanted. I told him we had the pickup and if it wouldn’t all fit there was some room in the trailer. They got right on assembling the order, loading it in the pickup as fast as it was pulled. We were on the way back to Cambridge in under an hour. I got the appliance caddy and moved the two coolers into kitchen and put the balance of the food in the shelter. After the electrical fixtures and supplies were in the greenhouse, I went to the kitchen to help Kristin cut and wrap the loins and add everything to the freezers. About half went into the freezer in the basement and the other half in the shelter freezer.

“When will the meat be ready?”

“Monday after three.”

“What’s the holdup?”

“Too many orders. He said we were lucky the wait wasn’t longer. They’re filling them on a first come-first served basis, barbershop style.”

“Is the boneless they use Black Angus or milk cow?”

“Yes. Black Angus milk cows. He said that boneless was hard to get but they had more than enough to get our order filled. He wasn’t too sure how many after us would have their requests for boneless filled. Knowing the guy the way I think I do, he’ll just substitute with whatever he can get. Would you like me to run down to Ankeny and get more Maid Rite and Tenderloins tomorrow while you hang the light fixtures?”

“Ah crap, I forgot to get the chain, S hooks and eyebolts. You get the stuff from Maid Rite and I’ll get what I need to hang the fixtures.”

“Is everything unloaded and put away?”

“You bet. I even put the water jugs back in the freezers until we see how much space the beef will take. A question just popped in my mind. How did you acquire your precious metals?”

“From coin dealers.”

“That wasn’t what I was getting at. Cash no name transactions or credit card purchases with your name being recorded.”

“Oh, I see; cash only and if they wanted my name I gave them my married name, Lawson.”

“I take it you went to court and got it changed back to Wells.”

“Long after I bought the gold I did, except for the gold and silver I bought when I sold the franchise. That was a no name deal because they just assumed my name was still Lawson and I didn’t tell them I’d changed back to my maiden name.”

“After I get the lighting installed in the greenhouse I have to install the new ATS for the new generator. I think I’ll build a cover for the open section of stairwell down to the shelter and cover it with a couple of inches of dirt. Very few people know about the shelter and I’d like to keep it that way.”

“Not to sound like a broken record, but what would you like for supper?”

“I put a six pack in the fridge. Pizza and a beer or a soda?”

“Which flavor?”

“The Ultimate Supreme ok?”

“Sure. Rather than a beer, could you make me a Tom Collins?”

“I’ll do that. I think since you’re having a mixed drink I’ll have Jack and Squirt.”

“Have you ever tried their Single Barrel?”

“I’m too cheap to spend the money and I rarely drink it neat or on the rocks. I’ve only been drunk twice in my life, once when I was about 15 and the second time when I was in tech school in Denver. I decided that alcohol and I didn’t get along well and I rarely drink. That mixed case we picked up would last for years if it were only me drinking it. The beer is nice with a pizza and we did buy 48 pizzas.”

“But you bought six cases of beer.”

“Four cases to go with the pizzas assuming we each have a can with the pizza. The other two cases for when we’ve put in a hot grueling day and just feel like a beer. I’m going to turn on Fox and see if they have an update.”

It wasn’t their breaking story but it was still a major news event. The earthquake swarm hadn’t slacked off indicating the continuing movement of magma. They had John Gibson substituting for Shep Smith. He reported that Lowenstern had declined a second interview stating he was too busy. They then ran some footage of Mt. St. Helens, it was smoking again. It seemed to me that the USGS had its hands full at the moment. I put my empty glass in the sink and Kristin put the cut up pizza on a platter, saying, “Dinner’s ready.”

Her drink was mostly full and I asked if she wanted a beer. She said, “No thanks” so I only got one out of the fridge. Pretty fair pizza for factory made, there weren’t any leftovers.

“Want to go with me out to the greenhouse? It just occurred to me that putting in the eyebolts will take two people. Someone has to be inside to drill the hole and insert the bolt and someone else has to be outside to fasten the nut.”

“We need a cherry picker for the person outside.”

“Good idea. Maybe we can rent one.”

“You know, I may just know someone who has one. I’ll check on that tomorrow while I’m getting the Maid Rite. If I’m right, he’d be a lot cheaper than renting one. The advantage of working in a café for years is all the people you meet. I’ll look him up in the phone book when I’m in Ankeny.”

I took off late the following morning to get the additional materials, a roll of chain, box of S hooks and two boxes of eyebolts with nuts. I added two 100’ lengths of 10 gauge extension cord and one three way splitter. The conversation of the previous night came to mind and I stopped at the package store and bought one bottle of Single Barrel. Fifty bucks, for crying out loud, for the 750m bottle.

Kristin was home when I got there. The guy with the cherry picker happened to be in the Maid Rite getting an early lunch. She asked him how much he’d charge to help install the eyebolts. A buck a mile and ten bucks an hour, door to door. She got his phone number and told him she’d check with me and let him know either way. We spent the remainder of the day on a tall step ladder drilling the holes. When we finished, she called the number he’d given her, his cell phone, and he said he’d be here at 9 am the next morning.

I was up until almost midnight assembling the fixtures, putting in the eyebolts on the top and doing what I needed to do, so hanging the fixtures would take the least amount of time. I moved the grow boxes from the center row and lay the assembled fixtures on that table. I could worry about the chain later.

By the time we knocked off, all I had left to complete was running the flex to the three rows of fixtures. We had supper and I went back out and made the final connections. The grow lights were ready to go by 10 pm. I flipped the three switches and the greenhouse was flooded with light.

“We have grow lights. Now no matter what happens we can grow food in the greenhouse.”

“You look tired.”

“I’m exhausted, if you must know. I forgot to ask, how many boxes did you get at Maid Rite?”

“Three of each and several bags of the French fries. We can take the day off tomorrow, except for feeding the horses, and pick up the meat any time after three the following day. I went through what we have on hand and except for a couple of items we’re covered on food for several years.”

“You want to pick up what we need tomorrow?”

“Why don’t you rest up and I go after the things, it’s really not that much.”

“You said you’re tapped out. Get some cash out of the safe and just pay cash. Did you catch the news?”

“The status on Yellowstone is unchanged, but Mt. St. Helens’ activity is marginally higher. And two more volcanoes in the Cascade Range have begun showing smoke, Mt. Rainer and Mt. Adams.”

“They did Rainer on that Mega Disasters program. That could be bad if it let loose. It could wash Seattle into the Sound.”

The next morning, I fed the horses and mucked the stalls. I left the door open so they could run in the pasture if they wanted. Kristin was gone for about two hours and those ‘few items’ had grown to more than a few. Well, maybe that’s an overstatement; she had several of a few different items. We divided her purchases between the shelter and the basement. I was glad I hadn’t put the soil down on the plywood covering the stairwell to the shelter.

One Tin Soldier – Chapter 5

Around 4pm on Monday, we were on our way home from the meat place when she reached over and turned on the radio, putting it on WHO. An excited announcer was relating the events of the previous half hour, the Cascadia subduction zone, which had been frozen, wasn't frozen anymore and had subducted. I pushed up the speed slightly and got us home.

We rushed to get the meat put away and then we got the horses into the barn. We put out extra grain and fresh bales of hay which should see them through a day or two. She put on a pot of coffee and started the deep fat fryer, pulling out two Tenderloins and some fries for supper. I grabbed a coke and plunked down in front of the TV, changing the channel to Fox.

It was like a scene from prehistoric times. Local affiliates were forwarding footage from whatever volcano was in their coverage area and Fox was moving from one to the next. Kristin came in and handed me a plate with a Tenderloin sandwich and fries. She then set up TV trays for both of us and went back to get her plate and a Coke. We sat, mesmerized, taking it all in. She cleared the plates and brought in coffee.

Over the course of the next few hours, it went from bad to worse. The FAA started to restrict flights and close airports. The first closed was Sea-Tac and they began to extend the no fly zone. Mt. Hood, one of the most climbed mountains in the range began to put out smoke. To make matters worse, the slip had generated a tsunami that had struck as far south as California and sent a wall of water racing across the Pacific. The Pacific Tsunami Warning Center in Hawai'i and the West Coast and Alaska Tsunami Warning Center both issued Tsunami Warnings.

It was getting late and we were getting tired. We had the Oregon Scientific WR602 on and the WRB603 in the stand on the desk. The latter includes a separate weather station. Both use the WR602 radio but the WRB603 has a remote wireless sensor for humidity and temperature.

“House or shelter?”

“Either way. Which would you prefer Kristin?”

“I think it might be wise to sleep in the shelter, just in case. With all the geological activity, the New Madrid Seismic Zone may feel left out and join in.”

“I tend to doubt that, but the shelter is fine.”

We moved the charging stand for the WR602 plus the WRB603 to the shelter and had both radios charging. The sensor was on the outside of the garage on the side facing the house. I had an antenna on the edge of the garage roof, specifically for those times when we had the 603 in the shelter. She set a package of bacon in the fridge to thaw

and had carried a 1½ pound loaf of bread and a carton of eggs to the shelter when we went down.

Nothing happened locally and we woke up with the alarm at 6:30 the following morning. I used the bathroom, washed up and put on coffee. Kristin called when she was out of the shower. I had originally put in a 10 gallon electric water heater but later replaced it with a 38 gallon model. Ten gallons would allow a quick shower, almost Navy style. The larger unit had a fairly fast recovery rate and two people could shower and still have some hot water left. I slipped into clean clothes and made the toast while she finished poaching four eggs.

We hadn't emptied the refrigerator in the kitchen because sleeping in the shelter was only a precaution. One, it would turn out, that had consequences.

I had the TV on, Fox of course, and we watched the news through breakfast. The tsunami had hit Japan and Hawai'i but caused little damage. Some of the western shore of the US had more damage. The Cascade Range volcanoes putting out smoke and or steam were continuing to do so but no additional volcanoes had become active. After we had the kitchen cleaned up and everything put away, we went top side to check on the horses and the place.

I was tending to the horses when she came to the barn carrying both shotguns with my 1911 on her arm and hers strapped on.

"We had company last night. Somebody cut the lock off the front vehicle gate. I brought your shotgun and .45. Take a look and see if you can fix it."

"Ok, show me."

"There was no reason for someone to do that much damage. It was probably some kids. Could you call the fencing company and tell them we need a new gate? Tell them we want wire on top and a heavier lock. I going to run in and pick up security lights for each of the gates with wireless remote alarms."

The motion sensors with the lights weren't hard to find. Motion sensors with lights and built in wireless transmitters were much harder to find. After I studied the schematic of the motion sensors with lights, I got 3 transmitters and two receivers. Using my long forgotten skills, I wired the transmitters into the motion sensors so the transmitter would send a signal if the light was activated by the PIR (passive infrared) sensor. I checked them after I had them installed and they worked, almost too well. I had to reposition the PIR units to avoid setting off the units with passing traffic.

The new gate was just a little stouter than the previous gate and had the barbed wire on the top. A Story County Deputy stopped when he happened to drive by.

"Are you sure that barbed wire is legal?"

“Nope, so I put it on the inside rather than the outside. We had a break-in last night and I added those motions sensors with the lights you see. I hooked them into small transmitters and if someone tries to get in again, the alarm in the house will sound.”

“You leave the law enforcement to us. Call before you go off halfcocked.”

“Do you even know where the expression halfcocked comes from?”

“Yes, the reference is to a single action revolver.”

“I’m surprised you know that, the revolver was released 100 years before you were born.”

“I compete a little in SAS.”

“I almost did that once, back in the late sixties. Bought the revolvers but couldn’t find a coach gun or a rifle in .45 Colt.”

“Oh, what do you have; short, medium or long barrels?”

“All three. I got a Marlin 1894 in .45 Colt and later, a Pioneer Arms coach gun.”

“Call if they come back.”

“You guys have a plan in case Yellowstone erupts?”

“We have a plan alright. I’m not so sure it will work if we get a lot of ash. The ash is very abrasive.”

“Will it interfere with your communications?”

“We don’t really know. Opinion is divided about fifty-fifty. What’s that hedge inside the fence?”

“Thorny blackberries.”

“Do you have much trouble with people harvesting those on the outside of the fence?”

“Yeah, but it doesn’t amount to much so we leave them alone unless they try to climb the fence. Usually a word to the wise is sufficient.”

“And when it isn’t”

“I rack the slide on my 870. They leave. End of story.”

“What’s it loaded with?”

“The first round is a beanbag, the second 00 buck and the third a slug.”

“Is that all you have, the Marlin, Remington and Colts?”

“Not exactly. I have an M1A too.”

“Springfield Armory?”

“Yes, standard model. I have a few more firearms than that and my wife has some too.”

I wasn’t about to tell the punk that Kristin and I weren’t married. It wasn’t any of his business. He had just a bit of an attitude and I responded with a bit of my own. I sure as hell wasn’t going to tell him about the AC-556 or the suppressors. And, for sure, he didn’t need to know we had as many sniper weapons as the Sheriff’s Department. I was fairly sure they didn’t have a .50 caliber rifle. Because of the terrain and all of the farms, Iowa requires the use of shotguns to hunt deer. A .50 caliber rifle bullet can travel six plus miles if launched like an artillery projectile.

I could sense that if he knew about the registered and unregistered (Mk 211) NFA possessions we had locked up in the shelter, I’d be in the Nevada (NE vay da, not Na Vad da) lockup faster than I could say *Jimmy Crack Corn and I Don’t Care*. Hell, he’d probably arrest me for having a .50 caliber rifle and they’re legal in Iowa. According to the NRA Factsheet, sawed off shotguns and silencers must be legal because the NRA doesn’t say they’re illegal. See if the judge believes that...all NFA items are illegal in Iowa, see Code section 724.1.

“I don’t want to have to come back because you shot a trespasser.”

“Bury ‘em deep, huh?”

“Jason, you’d better shut up before you get in any deeper. Come to the house, supper is almost ready.”

“I don’t know, maybe the stress of all of the geological activity coupled with someone breaking in and our having to replace the gate. This is Cambridge, Iowa not New York City, Chicago or Los Angeles. When I mentioned a break-in to him he didn’t even ask if I wanted to file a report. He was more concerned about those three stands of barbed wire.”

“Come on in and have a hot meal and forget about Deputy Dog. Maybe you just caught him on a bad day.”

“And we didn’t have a bad day?”

“Maybe I’d better mix you a Jack and Squirt so you chill a little. I wouldn’t mind a drink either.”

“You said supper was ready. Maybe we can have a drink after supper if you still want one. Besides, I’d like to eat in front of the TV and get caught up on what’s happened today.”

“Set up the TV trays and I’ll bring in the plates. I wasn’t sure, do you want a Maid Rite, a Tenderloin or reheated leftovers?”

“What’s hot?”

“The French fries, 2 Tenderloins and two servings of the Maid Rite.”

“Ok, one of each; mustard for the Tenderloin, ketchup for the Maid Rite and pickles for both.”

“Top or bottom?”

“On the bottom; mustard or ketchup topped with the pickles, please.”

Historical note: The Maid Rite sandwich is uniquely Iowan. It was invented in Iowa and mostly enjoyed in Iowa. The breaded pork tenderloin can be found in Missouri and Kansas, occasionally, but not the Maid Rite. As a child, I’d go into the local Maid Rite and get a sandwich and drink for 25¢ plus a penny tax. Sandwich was 15¢, drink 10¢. Can’t remember if fries were 10¢ or 15¢. The waitress would ask what you wanted on it and she’d build it, putting down the ketchup and then pickle and top it with as much meat as the bun would hold. She’d slap the top bun on and wrap it in paper. But then, I remember when McDonald’s had Golden Arches and a burger, fries and drink was 46¢.

In summary, Fox said that the volcanoes active in the Cascade Range were still active but not had erupted. Several volcanoes in Alaska had become active, rather more than usual. Lowenstern was shown for a 45 second clip where he referred to the activity at Yellowstone as approaching mega swarm status. Later, I tried to look it up on Wiki. The closest I could come was Super Swarm on Mega Disasters about the plague of locusts. Failing to find anything pertinent on Wiki, I tried the USGS website. It came up with a 403 error message, access is denied. Usually, a person gets a 404 message, file not found. Why would the USGS website be blocked? Too much traffic or were they, perhaps, limiting access to a select few? The latter was easily accomplished using a database of approved Internet Protocol Addresses. A corollary might an internet cookie that you save on your computer to keep you logged into a website like Frugal’s.

The problem with cookies is that you end up with a huge file and if you clear the cookies, you have to log back in to each website. A program like Cookie Cleaner allows you to save the cookies you want to keep and delete the rest. It’s freeware and updated periodically.

“Do you still want a mixed drink?”

“Only if you want one.”

“Well, I would like to try that bottle of single barrel I picked up.”

“You said you were too cheap to buy it.”

“True, but I’d hate to die having not tried it. Would you like to try it or do you want a Tom Collins?”

“I’ll stick with what I’m used to, but go ahead. If you think it’s really good, I might try a sip.”

Since I didn’t have any shot glasses per se, I used a three ounce rocks glass I picked up somewhere and filled it about half full. I mixed her drink and returned to the living room.

She was engrossed in a book so I gave her the Collins and sat down at the computer. I started checking the forums because they sometimes post current news even before the media.

I learned a little more than either Fox or CNN had. Mt. Hood and Mt. Adams were producing small amounts of lava. One guy whose address said Washington claimed he was in Seattle and would bug out as soon as his kids were home from school. He openly debated the wisdom of going south and said he was considering Vancouver.

“What do you think? Want me to empty the refrigerator and move the contents to the shelter?”

“Is something up? I didn’t hear the TV.”

“I checked the forums and a guy in Seattle is going to bug out but can’t decide between Vancouver and a fast run south past the Cascade Range.”

“Did you reply?”

“No, the post was at least 12 hours old and I’m reasonably sure he’s made his decision and taken off.”

“How much ash could we get under the worst case scenario?”

“Hopefully less than a foot. Hold on while I bring up ‘How Far is It’ and get the distances involved. It’s 883 miles (1421 km) (767 nautical miles), on a course of 91.1°. Darn, we’re straight east of Yellowstone. I used Jackson, Wyoming as the point of origin, that won’t

be more than 1° off. If it does let go, we're in for a bad time. This is not good; not good at all."

"I'm glad now I thought to buy two extra sets of pre-filters from American Safe Room. I initially bought two complete replacement sets and later bought the two additional pre-filter sets when I expanded the coverage to include other disasters such as this one."

"Expensive?"

"The full sets were seven hundred per set, the pre-filters only fifty-five per set. Might be hard to get now, the place is up in Oregon in the no-fly zone."

"Is this the only use for them?"

"Well...they would come in handy if we had another Dust Bowl. The pre-filter is intended for all applications. The HEPA and Carbon filters are for protections against WMDs. They filter radiological, bacteriological and chemical agents."

The cable news channels didn't have much new to add to the previous evening's reports. The volcanoes listed the previous night were still active. The states of Washington and Oregon had their National Guards out. A portion of northern California was included down to the southern terminus of the Range; Lassen Peak was under the watchful eye of the California National Guard. The Yellowstone swarm was continuing with a marginal increase in frequency and strength indicating that the magma was still moving.

I went out and let the horses out so I could scoop up the manure for our compost pile. I made it a point to limit the amount of bedding added to the pile, creating a separate pile for the excess straw. I added grain and hay to the feed troughs and hay racks for the two stalls. They came back in on their own three hours later to a cleaned up barn with fresh hay and grain out.

That night after we'd headed to bed, the NOAA NWS SAME radio came alive about the time we finished undressing. It was time to move to the shelter on a permanent basis. Yellowstone was close to another eruption.

"I'd better call and get the diesel, gas and propane tanks topped off. I sure wish we had more diesel stored."

"Do you have enough set aside to buy a full load?"

"Actually, I do. Since we stopped buying ammo, I've accumulated a substantial amount of money."

"Enough to top off all the tanks and buy another 9,000 gallons?"

“It will tap me out. But I’m sure I can handle it. With you tapped out, we could have a problem until we get my retirement checks or you get a dividend check.”

“There’s still cash in the safe.”

“If it’s enough, we’ll be okay. Anyway, what’s this about an extra 9,000 gallons of diesel?”

“A regular customer I had was an over the road trucker. He had a 40’ box trailer, a flat-bed and a 9,000 gallon tanker. I ran into him recently at the café and he mentioned that he still had his equipment although he’s retired. He said he was giving some thought to leasing out the three trailers.”

“Lease a tanker?”

“If it’s available. He could pull it to the distributor and take on a load of diesel. We could take him 4½ gallons of PRI-D and have it added when he fills the tanker. He can park the trailer over the diesel tank and run the line from the tanker to the fill pipe.”

“That’s about twenty two thousand five hundred for the fuel. What will the lease run?”

“I’ll pay that, in gold. Best guess would be about one tenth ounce per month.”

“I’ll call for the loads to top off the tanks. You call him and the distributor. I’ll make out a check for the fuel. You can take the check and the PRI-D to him and he can get it taken care of. Does that sound ok?”

“Yes, let’s get those calls made.”

It didn’t actually take much to top off the diesel, gas and propane tanks. I kept a record of our usage and ordered a mixed load of diesel and gasoline. Kristin took the check and the PRI-D to the guy with the tanker and he showed up just after noon.

“Where do you want it?”

“The fill pipe is over there.”

“Ok, I’ll move the tanker and hook up the line. The lease on the tanker is two ounces per year. Normally, I’d charge one tenth ounce per month. With this Yellowstone thing, I got several calls from people wanting to lease it. I explained it to Kristin and she said ok. She already paid me. Think we’ll get much ash?”

“Hard to say. The longer it lasts, the greater the volume. The largest was 2,450km³. I’m concerned because of that Cascadia subduction and its effect on the Cascade Range. If some of those volcanoes let loose, it could add a fair amount of additional ash. The last thing I heard on TV just a while ago was that the airspace west of the Mississippi was

closed except for the most southern routes. About half of all the flights around the country are grounded.”

“They were talking about Alaska.”

“They’re lots of volcanoes in Alaska. One area is called the Valley of Ten Thousand Smokes. Novarupta erupted in 1912 and put out about 15km³ of ash. Those weren’t volcanoes, just cracks in the crust spewing gases. I can’t remember the scientific term for them.”

“What’s going on with the planet? Half the scientists claim we have global warming and the other half say we’re entering a period of global cooling. The hurricanes we do have seem to be worse. Strange...really strange.”

“It’s just Mother Nature in her finest hour.”

“I’d better get going; I’m expecting a propane shipment for the tank I had put in for our new generator.”

“Ok, see you. Thanks.”

“How long are we good for Jason?”

“At minimum power, 17,273 hours and at maximum power, 6,552 hours. My best guess is around 8,261 hours, a little shy of a year. Assuming we lose power. We may not because of the nuclear power from the Duane Arnold Energy Center in Palo. It supplies about 2,000 megawatts.”

“God help the people that bought natural gas fueled generators. Most could be converted to propane if they had replacement jets and a supply of propane. Instructions on how to make the conversion would be useful too. We get our propane via pipeline and if the grid goes down, there won’t be any propane either. We can go for years on our supply of propane if we restrict it to the hot water heater and kitchen stove.”

“You sound like we’d be better off with a different source of energy.”

“Wind. There is considerable competition for wind farms among farmers in places like Iowa or ranchers in Colorado. Farmers, with no investment on their part, typically receive \$3,000-5,000 per year in royalties from the local utility for siting a single, large, advanced-design wind turbine, which occupies 0.25 acres (1,000 m²) of land. This land would produce 40 bushels of corn worth \$120 or, in ranch country, beef worth perhaps \$15.”

“It’s a little late in the day to be thinking about wind energy. Assuming we could find a turbine and all of the equipment; and, further assuming we could pay for it with gold or silver; and, further assuming they could get it up and running in the time before the ash

gets here, it's a non-starter because the ash would destroy the bearings in the turbine. What you'd better plan on doing is put one of those pre-filters on generator intake."

"I'll get on that right now."

"Wait. Do we have gas masks or Tyvek suits?"

"No, it was on my to-do list and it didn't get to-done."

"Where are they?"

"San Diego, California. If I remember, they have a toll free line: 1-877-AGM-1010. It would have to be overnight air and hope like hell they can get it to Des Moines within 24 hours. We're two hours ahead of them and maybe you can con someone into shipping it today."

I had a bad time configuring a frame to hold the pre-filter and didn't get done until supper time. It took a half a box of Band-Aids to cover all the nicks and cuts from working with the thin sheet metal.

"Did you reach them?"

"Sure did. Did you know that they carry the Safe Cell?"

"Must be something they just added."

"I got 2 Tyvek suits, gloves, boots, tape, Millennium masks with CBRN filters plus an extra 10 filters, the voice amplifiers, gas mask bags, two extra clear and tinted lenses and two addition Safe Cell pre-filters, just in case."

"Overnight delivery?"

"He said it was overnight or do without."

"How much was that?"

"It was one of those, 'if you have to ask the price you can't afford it deals'. He said we could substitute P-100 masks and nitrile gloves after the ash lessens. I checked and we have 4 boxes of the filters and 2 boxes of the gloves."

"How did we pay for it?"

One Tin Soldier – Chapter 6

“I had forgotten about the reserve I have in my high interest checking.”

“Reserve?”

“Yes. Way back when I opened the account, I deposited five thousand of the property settlement and didn’t include it in the balance. I sometimes forget and I have one heck of a time balancing the checkbook. It’s sort of like life insurance.”

“Yeah, and you don’t have to die to collect.”

“Right. I used my ATM on that account and FedEx should deliver the stuff tomorrow before noon.”

“I sort of wonder what else I forgot. In a way it’s nice being ready when something like this happens. We could have gotten by without the trips to Costco, Sam’s and Hy-Vee but I’d rather have it and not need it.”

“Something just occurred to me.”

“What?”

“I assume that Cascadia caused the Cascade Range to become active. If that’s the case, did it affect Yellowstone or vice versa? It seems to me that I read that Yellowstone sometimes reacts to other geological events. California is famous for their earthquakes and TOM wrote in a story about Cascadia triggering the San Andreas.”

“I remember that. It, in turn triggered Long Valley. Nuclear winter is speculation but volcanic winter isn’t. Remember *Frankenstein*?”

“That was just a book.”

“Yes it was just a book written during the *Year Without a Summer*, 1816, due to the eruption of Mount Tambora in the spring of 1815.”

“Have you ever heard of the Toba catastrophe theory?”

“Yes. A mega eruption 75,000 years ago reduced the human population to between 1,000 and 10,000 breeding pairs. It apparently shows up in genetics. Nah, that won’t happen this time, there are six and a half billion people on the Earth.”

“Now there are. Have you ready Jerry’s new story, *What If?*”

“Not yet. Did you download it?”

“Yes. You can read it later.”

“I’ll wait until the ash gets here so I can read it uninterrupted.”

“You’ll get a kick out of it because the male lead is named Gary.”

“The female lead named Kristin?”

“No, Bethany. She went looking for a shelter location on the shores of Gichigami aka Gitche Gumee.”

“Lake Superior? Gordon Lightfoot fan, huh? *The Wreck of the Edmund Fitzgerald.*”

*The legend lives on from the Chippewa on down
of the big lake they called "Gitche Gumee."
The lake, it is said, never gives up her dead
when the skies of November turn gloomy.
With a load of iron ore twenty-six thousand tons more
than the Edmund Fitzgerald weighed empty,
that good ship and true was a bone to be chewed
when the "Gales of November" came early.*

*The ship was the pride of the American side
coming back from some mill in Wisconsin.
As the big freighters go, it was bigger than most
with a crew and good captain well-seasoned,
concluding some terms with a couple of steel firms
when they left fully loaded for Cleveland.
And later that night when the ship's bell rang,
could it be the north wind they'd been feelin'?*

*The wind in the wires made a tattle-tale sound
and a wave broke over the railing.
And ev'ry man knew, as the captain did too
'twas the witch of November come stealin'.
The dawn came late and the breakfast had to wait
when the Gales of November came slashin'.
When afternoon came it was freezin' rain
in the face of a hurricane west wind.*

*When suppertime came the old cook came on deck sayin'.
"Fellas, it's too rough t'feed ya."
At seven pm a main hatchway caved in; he said,
(*2010 lyric change: At 7 pm, it grew dark, it was then he said,)
"Fellas, it's bin good t'know ya!"
The captain wired in he had water comin' in*

*and the good ship and crew was in peril.
And later that night when 'is lights went outta sight
came the wreck of the Edmund Fitzgerald.*

*Does anyone know where the love of God goes
when the waves turn the minutes to hours?
The searchers all say they'd have made Whitefish Bay
if they'd put fifteen more miles behind 'er.
They might have split up or they might have capsized;
they may have broke deep and took water.
And all that remains is the faces and the names
of the wives and the sons and the daughters.*

*Lake Huron rolls, Superior sings
in the rooms of her ice-water mansion.
Old Michigan steams like a young man's dreams;
the islands and bays are for sportsmen.
And farther below Lake Ontario
takes in what Lake Erie can send her,
And the iron boats go as the mariners all know
with the Gales of November remembered.*

*In a musty old hall in Detroit they prayed,
in the "Maritime Sailors' Cathedral."
The church bell chimed 'til it rang twenty-nine times
for each man on the Edmund Fitzgerald.
The legend lives on from the Chippewa on down
of the big lake they call "Gitche Gumee."
"Superior," they said, "never gives up her dead
when the gales of November come early!"*

"You should stick to playing a guitar."

"I don't play the guitar."

"Exactly, it matches your singing."

"How did we get sidetracked talking about a ship that sank 35 years ago?"

"Lake Superior."

"Oh, yeah, some person looking for a shelter location. Well, if they don't have one now, they're in trouble. What happened?"

"He had a place on Table Rock Lake. Sad ending, they got married and he became the Vice President."

“You know I feel the same as I always have Kristin.”

“What’s wrong with our current arrangement? Neither of us has an absolute claim on the other. It doesn’t make sense to screw it up by getting married. I’ve got another question and it doesn’t have to do directly with what we’ve been discussing. How do you want me to do the bread? I have the three loaf version strapped Pullman pan and could make a French bread and some cinnamon rolls.”

“Pretty late in the day. Want to put it off until tomorrow?”

“Works for me. If we have more trouble and the phones go down, how are we going to contact Deputy Dog?”

“You know about the fusible links in those Yaesu radios?”

“I have no idea what you’re talking about.”

“The Japanese build most of the popular Ham radios. The US standards are different from the International standards. It’s cheaper to build a radio that will cover all bands and disable certain bands on the radios so they comply with both US and International standards. In a pinch, a Ham can melt a link inside the radio and eliminate the lockouts.”

“Have you had your fusible links removed?”

“They can only lock me up once. Eight silencers are good for 40 years, the AC-556 for 5 more and then there’s the matter of four illegally modified radios. Each round of the Mk 211 is a destructive device. Think ...*in the year 2525.*”

“Do you even know how to operate a hand grenade or a LAW rocket?”

“I have the field manuals.”

“In other words, no.”

“How hard can it be? Clint Eastwood can fire one.”

“I’m hot, tired and don’t feel like cooking. You’re going to have to settle for pizza and beer or eating out.”

“I sure don’t want to drive very far to eat. You get a shower and I’ll put a pizza in. Name your poison.”

“Supreme and you’d better add another six pack to the refrigerator.”

I looked and there were only two cans so I put two in the freezer to chill fast and the other four in the fridge. I started the oven heating and got a pizza from the freezer in the basement. Then, I sat down and had one of the cold cans of beer. When she came out, I pulled the beers from the freezer and headed off for my own shower. I was only a few minutes late for supper.

“This beer was a little warm.”

“I put two cans in the freezer and the other four in the fridge. I pulled the cans from the freezer before I went to shower. You must have gotten one of the warm cans. I’ll drink that and you find the really cold one.”

“After we’re done eating you can start sealing the windows with duct tape while I clean up the kitchen. Once the house is sealed up, we’ll empty the refrigerator into the fridge in the shelter. We need to bring several changes of clothing too. The last step will be to seal the kitchen door with duct tape. Do you have anything you can put over the fire-place chimney?”

“I’ll cover it with a tarp and lash it in place with a hank of paracord.”

“What about the horses?”

“Essentially the same thing, canvas over the two doors held in place with bungee cords.”

“I’ll help with that once we’re done with the house.”

I don’t really know why but I disconnected all of the radios and took them to the shelter. The package I’d gotten from Radmeters4U which contained the usual assortment plus a CD V-700 and CD V-717 also went to the shelter. I filled another box with batteries and spare light bulbs for our MagLites. The tarps and paracord were in the garage and I closed the damper on the chimney and covered it with the tarp. I wrapped it tightly with paracord.

I then moved to the barn with the two tarps and some roofing nails. I went back and got the ladder, hammer and bungee cords and returned to the barn. I had the back door covered when Kristin jointed me and we made short work of the front door.

“You ready to help with the fridge? Don’t forget several changes of clothes.”

Big deal, I had a total of eight sets of underwear, a dozen pair of socks, eight shirts, four pairs of jeans, athletic shoes, my cowboy boots and Wellingtons plus my two hats. My outerwear consisted of the slicker, Drover’s coat and a light jacket. I had a suggestion list for various things I wanted and they could just as well be birthday or Christmas presents. It included a Cooper ZERO GRAVITY A2 Leather Bomber Jacket and rifle scabbards for the horses.

With all of the chores done, we went down to the shelter and locked up. I set the Safe Cell to bypass the filters and we each got a shower. After, she made hot chocolate and buttered toast (to dip in the cocoa) and we collapsed in front of the TV. Fox was reporting that all air traffic in the US west of the Mississippi was grounded.

“So much for the FedEx delivery.”

“They might land in Moline and truck it in from there.”

“Yeah, and brown cows give chocolate milk. But, you never know, they could haul it from Memphis to Moline by air and by ground from Moline to Des Moines. Approved Gas Masks sure won’t give you a refund unless they get their equipment back.”

“I’m ready to turn in. You staying up to watch the news or coming to bed?”

“I’ll be in shortly. I want to hear WHO’s 10pm broadcast.”

The ‘good’ news was that nothing had changed.

“I didn’t mean to wake you.”

“I wasn’t quite asleep, Jason. I think I may be more concerned about this than I let on; it’s keeping me awake. What was on the news?”

“What little ash that gets this far will arrive early afternoon tomorrow.”

“No more eruptions anywhere?”

“They didn’t report any. Mother Nature is enjoying her finest hour and getting even for any perceived wrongs humans have done to the planet.”

“Just as long as that mountain in the Canary Islands doesn’t collapse, the country may survive this.”

“Do you mean La Palma? That’s the island with the Cumbre Vieja volcano.”

“The name sounds familiar.”

“God’s in Heaven using the Mega-Disasters TV show as a guide book to direct Mother Nature? I seriously doubt that. It may just be a chain of semi-related events. One would expect the Cascades to react to a Cascadia subduction. Yellowstone has reacted to other events before. There was no real reason to believe it would have an explosive eruption other than the fact that it did. But, if some of those PAW stories are right, it might not be over yet.”

“Doesn’t TOM live on the San Andreas Fault?”

“Three miles north if I recall.”

“I wonder what The Three Amigos are doing in response to this?”

“Clarence moved back to Alabama and Ron moved to Arizona. I guess that leaves Gary alone. As much as he denied it at the time, I think he loves the Antelope Valley. It’s a strange place. Hot as an oven in the summer and you sometimes need an arctic parka in the winter. A small amount of water accumulates on the dry lake during the winter and the spring winds whip it back and forth to level the surface of the lakebed.”

“Do you miss it?”

“It was better than Eglin, but not by much. Even if I had stayed in and completed my thirty, I’d have been out in ninety one. I sometimes miss it; mostly I’m happy I got out and had a chance to do some of the things that make going through this event, in relative comfort, possible.”

“I guess we’re just going to need to tough it through, aren’t we?”

“That’s the way I see it. I just hope that all of the airborne ash doesn’t lead to worse.”

“What do you mean?”

“That Toba catastrophe theory is based on the inability to grow food. If there is enough ash in the air and it hangs on for very long, people all over the world will be starving. Famine has been known to cause a few wars. From the viewpoint of the Japanese, World War Two was over acquiring needed natural resources. Food is as much a natural resource as oil or iron; if I remember my history correctly.

“Other than a few coal and iron deposits, Japan lacked true natural resources. Japan, the only Asian country with a burgeoning industrial economy at that time, feared that a lack of raw materials might hinder its ability to fight a total war against a reinvigorated Soviet Union. In the hopes of expanding its resources, Japan invaded Manchuria in 1931 and set about to consolidate its resources and develop its economy. Insurgency by nationalists south of Manchuria compelled the Japanese leaders to argue for a brief, three month war to knock out Chinese power from the north. When it became clear that this time estimate was absurd, plans for obtaining more resources began. The Imperial Navy eventually began to feel that it did not have enough fuel reserves.

“To remedy this deficiency and ensure a safe supply of oil and other critical resources, Japan would have had to challenge the European colonial powers over the control of oil rich areas such as the Dutch East Indies. Such a move against the colonial powers was however expected to lead to open conflict also with the United States. On August 1941, the crisis came to a head as the United States, which at the time supplied 80% of Japa-

nese oil imports, initiated a complete oil embargo. This threatened to cripple both the Japanese economy and military strength once the strategic reserves ran dry. Faced with the choice of either trying to appease the US, negotiate a compromise, find other sources of supply or go to war over resources, Japan chose the last option. Hoping to knock out the US for long enough to be able to achieve and consolidate their war-aims, the Japanese Navy attacked the US Navy at Pearl Harbor on December 7, 1941. They mistakenly believed they would have about a two year window to consolidate their conquests before the United States could effectively respond and that the United States would compromise long before they could get anywhere near Japan.”

“Yamamoto was right, wasn’t he?”

“The sleeping giant comment was attributed to him in the movie ‘Tora, Tora, Tora’. I don’t know if he said it or not, I wasn’t born until 1May43.”

“True, but you make a valid point. Worldwide famine could lead to worldwide war.”

“Only if people act stupidly. The US will recover quickly from this event and once again become the breadbasket of the world.”

“Good night.”

“Sleep tight.”

I was up at 6am, showered, shaved and used the toilet. My first task was to check on the two horses. I added some grain and split a bale of hay to top off their hay racks. I released the bungee cords and tacked the canvas door cover back so they could have some time in the pasture before being confined to the barn for an indeterminably long period. Next I returned to the shelter and put on coffee and woke Kristin.

“What would you like for breakfast?”

“Bacon and eggs; toast and hash browns. Is the coffee ready?”

“Should be about finished dripping. I let the horses out and will clean their stalls after breakfast. Why don’t you do your morning ablutions?”

“Can you hold breakfast for 20 minutes?”

“It will take that long to find a package of hash browns and get the bacon fried.”

“I put packages in the fridge to thaw last night.”

“Hash browns or bacon?”

“Both.”

I set 6 slices of bacon in one frying pan and added oil to a second for the hash browns. When the oil was hot, I added two servings of hash browns to the pan and turned the bacon. Next, I turned the hash browns and put the bacon on a paper towel to drain. I pulled out the poacher and added water before turning on the heat. A pat of butter in each cup followed by an egg and breakfast was nearly complete. I dropped the toast so it would be done about the same time as the eggs. I buttered the toast, filled the plates and set them on the table.

“Perfect timing I see.”

“I got lucky.”

“My mother would have fits if she saw how many pans it took for you to cook breakfast. She’d fry the bacon, drain some of the fat, fry the hash browns and use the drained fat to fry the eggs, dirtying a single pan.”

“My mother wasn’t much of a cook. She got by, but barely. If we were having ham, she’d bake it until it died. Sure made great fried chicken and potato salad though. She used celery seed instead of chopped celery. Let’s see, potatoes, eggs, onions, celery seed and Miracle Whip. That’s about the only thing I miss from growing up.”

“I’ll try to make a batch. I know we have all of those ingredients except for Miracle Whip. All we have is mayonnaise. I’ll clean up after you while you muck out the stalls. Any signs of ash yet?”

“Not when I went out. They said early afternoon so I figure sometime between one and three.”

“I hope we get our order from San Diego in time. Why are you putting on nitrile gloves?”

“To keep the leather gloves from stripping off my Band-Aids.”

“You know, I have a bottle of something that seals cuts so you don’t have to wear Band-Aids. It’s called new skin or something similar.”

“I should be done in forty-five minutes. Why don’t you call FedEx and give them the tracking number for our goods? They might give you the status.”

“Did you call?”

“Sure did. We may have gotten lucky. It was on the last flight out of San Diego for Memphis and arrived in Moline around four this morning. He said they were trucking the orders to Des Moines. He also said they couldn’t guarantee noon delivery.”

“Look, it’s only about 175 miles from Moline to Des Moines. Figure three hours. We should have it by ten.”

“We might if we lived in Des Moines. Up here, who knows?”

I looked at my watch when the FedEx truck pulled up, 11:45.

“I was afraid we wouldn’t get this in time.”

“What is it?”

“Gas Masks and filters.”

“For the ash?”

“Yes. Have you heard anything?”

“Only that it’s in portions of northwestern Iowa. You really think you’ll need those?”

“I hope not but I expect we probably will.”

“Sign here.”

After lunch, we cleaned up the dishes, put the horses back in the barn and secured it. Then, we set up two lawn chairs facing west northwest and waited for the cloud to arrive. I don’t know what I expected, a wall of dust like they had back during the dust bowl era or something similar, I suppose. The sun was mostly overhead and the view to the west was simply a bit darker than normal. Soon there were a few fine particles of sharp sand drifting to the earth and we put the chairs in the garage, checked the gates and went down to the shelter.

“That was eerie.”

“Probably still is. Let’s put on WHO and watch their coverage.”

“Want coffee or a coke?”

“Coke.”

WHO had been recording the event from the time it came within range of their cameras. An insert showed the current outside view, which wasn’t much, while they ran an edited tape showing the approach of the ash cloud. It was progressing about 12-15mph to the east and east southeast.

One Tin Soldier – Chapter 7

“I should have put in a tunnel like Percy did to reach the barn from the shelter.”

“Stop worrying about what we didn’t do and be thankful for what we did do.”

“I wanted to put CCTV cameras on the radio tower but didn’t because of EMP.”

“If you had put them up, that ash would probably have scratched the lenses until you couldn’t see anything anyway.”

“There is that. I’m going to switch to Fox for a minute or two.”

... On the west coast, Mount Rainier erupted sending massive lahars through Tacoma into the Puget Sound and reaching as far north as the southern portion of Seattle. At this hour, the eruption is ongoing.

Further south, Mt. St. Helens, in a near repeat of the 1980 eruption, experienced an explosive eruption with the accompanying lahars. The USGS stated that unlike the 1980 eruption, the ash volume will reach forty cubic kilometers.

Mount Lassen in California which has ongoing minor lava flows also erupted. No estimate has been given so far about the size of that eruption. The observatory at the Long Valley Caldera reports that the resurgent dome has risen two meters over the past 24 hours.

In the Pacific, Anak Krakatau is now showing smoke and seismic monitoring indicates the movement of lava.

Finally, in the Mediterranean Sea, the ongoing eruption of Mount Etna on Sicily took a dramatic turn earlier today when the volume of lava nearly tripled and threatened villages that escaped past eruptions. We’ll be back after a word from our sponsor.

“Not all of those are going to put ash into the air. The ones that will are divided between the northern and southern hemispheres. Now if Long Valley or Yellowstone erupts we’re in for trouble for much longer than I thought likely.”

“What makes you think they might erupt?”

“In 1980, shortly before the eruption, the dome in Mt. St. Helens grew at an astonishing rate.”

“How much ash did Long Valley put out?”

“A shade under 600km³. Add that to a possible 2,450km³ for Yellowstone plus the minor amounts the other volcanoes put out and the ash might reach the eastern seaboard.”

“You studied history in college?”

“I never went to college. I did get bored at times and headed to the library.”

“So what does your historical perspective on this tells us?”

“I was right the first time, ‘Katy bar the door, here come the Indians.’”

We had switched back to WHO when the lights went out and the generator kicked in. I jumped up and turned off the TV in case of a voltage spike. Once everything was running smoothly, I turned the TV back on. WHO was just coming back up, apparently they had a backup generator.

Sorry about that folks, we just lost power and it took a minute for our backup generator to kick in. Due to a limited fuel supply at our studios and the transmitter site, broadcasts will be limited to ten minutes at the top of every hour. WHO radio uses a different power source and will remain on the air, provided it can get additional diesel fuel. We will rejoin you at 2pm.

“They must be on natural gas or propane.”

“Can we crack the blast door and peek out through the landing door?”

“I suppose we’ll have to periodically. How about once every 24 hours?”

“How often do you need to go take care of the horses?”

“Every other day. They’re set for two days at the moment.”

“Let’s go look.”

“Lead the way.”

“Are you going to help with the blast door? The more weight we put on it the faster it moves.”

“Sure.”

We opened the blast door and climbed the steps to the landing. The door opened outward and she cracked it and took a peek.

“It’s like twilight.”

“Let me look. You’re right, it’s darker. Do you want to look again? Last chance for 24 hours.”

“No thank you.”

“It’s about time for WHO to come back on again.”

“We can run a radio can’t we?”

“Sure. I can hook it to the Discone.”

“What time does your watch show Jason?”

“Three after, why?”

“They’re not on the air.”

“Try channels 11, 8, 5 and if they don’t come up, try Fox.” (PBS, CBS & ABC; Fox was on a transponder)

“Nothing.”

“Let me hook up the radio. Can you get it out of the cabinet, please?”

She handed me the radio and I plugged a bayonet type plug into the antenna connection and clipped the other end onto the radio antenna using an alligator clip. We ran the dial, nothing. WHO AM radio is 1040 and a clear channel station and WOI AM is 640 and closer than Des Moines. The only thing that occurred to me was that perhaps there was enough electrical charge in the atmosphere because of the ash to temporarily disrupt communications.

“I don’t know what to tell you Kristin. My guess is atmospheric effects due to the ash. Do you want to eat early and put on a movie?”

“I’m not overly hungry. I’ll fix you something if you want.”

“If I get hungry, I just get some leftovers out of the fridge. How about that movie?”

“I think I’ll read if that’s ok.”

“There is a box of books around here somewhere.”

“I have one I’ve been working off and on for over a year.”

“Which one?”

“*Atlas Shrugged*. Who is John Galt?”

“He’s a member of Frugal’s Forum and has his own website called Shenandoah.”

“No, that’s just the question asked throughout the novel.”

“Just teasing.”

I measured the ash and we received slightly less than one inch. The stair well had gotten cleaned out the first time I’d had to go feed the horses and I covered it with plywood before returning to the shelter so I wouldn’t have to sweep it again.

Meanwhile, Kristin unsealed the back door to the bungalow and vacuumed up all the dust she could. She had to vacuum around the back door before she could get the duct tape to stick. Even with the bungalow supposedly completely sealed up, ash drifted in through tiny cracks, somewhere. It indicated if nothing else, the house wasn’t so tight we’d suffocate.

Feeding and mucking up after horses isn’t my idea of quality time and Kristin said that cleaning the house every other day was way down on her list. Even after we moved out of the shelter, small amounts of ash continued to accumulate and weekly dusting was mandatory. One major disaster had been avoided, Yellowstone and Long Valley didn’t erupt.

Since we were on generator power, that meant a daily check for leaks, oil and coolant levels. Once every four days, I’d remove the air cleaner and tap it clean or replace it. Once every ten days, I had to check the battery and a few other things and every twenty-one days, shut it down and change the oil. Fortunately, we still had the QD12.5 in the garage and I’d managed to get it wired into the grid side of the ATS allowing me to start it up and let the Kohler shut itself down. While I haven’t mentioned it, one of the tasks I completed before we sheltered was to cut a hole in the garage floor and auger a hole for a section of three inch pipe to the shelter and from there, along the corridor to the generator room. The downside was the additional noise that slipped past the cuts I made for the pipe until I filled them with foam insulation.

There was ash in the air in the form of a slight haze. The sun wasn’t a bright light in the sky that you couldn’t look at. Maybe a light fog would describe the effect, but I hadn’t been in fog for a while and wasn’t sure. Visibility was about ½ mile, at the most. We were just on the edge of Cambridge, past the town limits. We couldn’t really make out most of the buildings in town. We’re east of town, near, not on, the South Skunk River.

“I hate to think this far ahead Kristin, but once that tanker is empty, I’m going to need to go find another 9,000 gallons of diesel.”

“How much is left?”

“Well, at the moment, it’s mostly full. If the air clears and Washington gets its head out of you know where, maybe they can get the grid up. Another thing to consider is that, even with proper maintenance, that generator will only run two years tops.”

“How do you figure?”

“There are 365.25 days in an average year and 24 hours per day or 8,766 hours in an average year. Times two is 17,532 hours and I’d be surprised if it ran much over 15,000 hours before something needs to be rebuilt. If I’d have been thinking, I’d have put the generator in the garage, not a hole in the ground.”

“Can’t we move it? It would mean digging down to that road plate and lifting it with the block and tackle. Then, we’d have to disconnect and lift the generator up to ground level. Next, we move it into the garage, right?”

“So far.”

“You have a fuel pump between the tank and the generator and the generator has its own fuel pump, right?”

“You’re on a roll.”

“So, Jason, we reroute the fuel lines and the power feed to the garage. It doesn’t matter where the ATS is located. While you’re at it, maybe you could pick up an old fashioned outside DPDT switch and manually switch between small generator and the grid and feed that to the ATS.”

“No can do, honey. The grid tie has to go into the ATS so the manual switch would have to go between the two generators. Any time you use a manual switch like that, you’re switching the generator from no load to full load or some portion thereof. That bogs down the generator. Since the QD12.5 puts out a maximum of just over 100 amps, it might work, but no guarantees. What would be a better idea would be to get a synchronizer and feed both generators into it. Then we could cut either of them off.”

“I’m a waitress, remember? You’re the electrician.”

“True, but I’ve not worked on those types of setups much.”

“Do you think you can figure it out?”

“We can get a synchronizer from Kohler. I just should have bought one in the first place. I’m sure they have an installation manual for the unit.”

“When can we go?”

“If we go slowly so the ash doesn’t scratch the windshield and I start with a clean air filter and take a spare, anytime.”

“Will they be open?”

“They probably have a line out of the door. They may have sold out and closed up shop. If it were me, I’d keep at least one salesman and one parts person working.”

The air filter was clean so I just grabbed two spares and we started out for I-35. Nobody in their right mind would be speeding in this stuff...but there’s always a kid who thinks he’s Superman. It took ninety minutes to get to the Kohler dealer. He had lights on, probably using a Cummins diesel.

“Help you? No wait, I just sold you a generator last month, right?”

“Yep. I screwed up. I had, and still have, a Cummins Quiet Diesel 12.5. We bought the 40REOZJB so we had enough power for the lights in the greenhouse. We have an underground shelter and the generator room is off to the side of it at the same floor level. What we want to do is dig out that generator and install it in the garage and synchronize the two generators so we still have power when one is shut down for servicing.”

“Two hundred amp?”

“Yeah, single phase, 120/240, 200 amp synchronizer.”

“You have any money?”

“What’s the spot price on gold?”

“I don’t know, the internet is down.”

“We had the same problem. How much gold for the synchronizer?”

“In a box or installed?”

“To install it you’d have to move the generator out of that hole.”

“I know. Say two ounces, installed and running.”

“Say one ounce; it was over twelve hundred when the internet went down.”

“Ounce and a half and it’s a turnkey deal. We’ll even put the cover back in place and refill the hole. I assume you have a small room with some kind of removable cover if you replaced the 12.5 with the 40.”

“Honey?”

“How soon?”

“Give me directions and we’ll be there at eight tomorrow morning. COD.”

“Does that mean when you arrive or when you’re done?”

“Show me the coins when we arrive and pay me when we leave.”

“Kristin, draw the man a map. How are you fixed on filters?”

“How many cases?”

“How many to the case?”

“Twenty four.”

“Three cases of each.”

There are 3 different filters and if you change the oil at 500 hour intervals, you need 18 oil filters and probably the same number of fuel filters. The number of air filters would depend on how much ash the pre-filter removed. Three cases of each would be a four year supply and we bought a case of each when we bought the generator.

“Total is now two ounces.”

“Deal. See you tomorrow at eight.”

“Why did you pay that much for the filters?”

“Because I’m dishonest?”

“What do you mean?”

“He slipped a digit and multiplied by two not three. That’s what he gets for doing it in his head instead of using a calculator.”

“Maybe gold is higher.”

“It probably is higher. We didn’t get hurt, that’s for sure. How is your supply of tenth ounce coins?”

“Are you asking if I have twenty?”

“Yes, I give you two full ounces.”

“Why do you want to do that?”

“I don’t want him to get the idea that we have a lot of gold. If it’s all one-tenth ounce coins, he might make the wrong assumption and assume that we don’t have much gold.”

“But ten tenth ounce coins are worth more than a one ounce coin.”

“Not anymore. Now they’re simply gold. Maybe I ought to pawn off those two gold buffalos I have.”

“Why?”

“They’re 24 carat and soft. Yeah, that’s what I’ll do. Forget the tenth ounce coins.”

“You’re late.”

“Yeah, bad accident on I-35. Some kid running at 70 who should have been running at 35. Do you have the gold?”

“Here you go.”

What are these?”

“One ounce gold Buffalos. They’re .9999 fine, pure gold.”

“What are the Eagles?”

“They’re only 22 carat, not 24 carat.”

“Why are they in a plastic case?”

“To keep them in an uncirculated condition.”

“Oh. Ok.”

Even if many of his customers were preppers, he seemed not to know what an average prepper knows. Each coin has the same amount of gold, one ounce. However, the Eagles can be circulated because the gold doesn’t rub off. The Eagles also contain 3 percent silver and 5⅓ percent copper.

Our pasture was to the east of where the bungalow and garage set and didn’t get as much wind. All of the east facing building surfaces had an accumulation of ash and the west facing surfaces were kept clear by the wind. They had an excavator, a truck mounted crane and shovels to get that last bit of soil off the plate. They disconnected everything and did the rerouting as part of the turnkey project. Before they lowered the

plate back down, I slapped a coat of Thomas roofing tar on the top of the generator room walls creating what I hoped would be a waterproof seal. I was going to turn the generator room into our armory. Since the escape tunnel extended from the generator room, we would have outside access to the armory.

“It’s done.”

“Did you test it?”

“It will work.”

“I believe you, but you still have to test it.”

“Start that piece of Cummins junk and stand back and watch.”

I fired it up and he got some kind of meter that showed the different phases on the line. The output was single phase, in synch, and another meter showed the lines pulling 170 amps indicating electricity was being drawn from both sources. It took me a minute to figure that out. The power had been down while they worked on the units. When they turned them on, the QD actually supplied additional load because everything was running at once.

“Ok, here’s the gold. Did you unload the filters?”

“Oops.”

When they say, “oops,” you just naturally think, “This is not good.”

“Remind me to shut down non-critical circuits when I service the Kohler. At the very least, make sure the lights in the greenhouse are out. We were pulling 170 amps. The main service panel is rated at 200 amps but I’ve never known it to draw that much current.”

After they left, I checked on the horses and refilled their feed. Kristin had a meatloaf in the oven with potatoes. She also had two ears of sweet corn from the freezer for the vegetable. She hadn’t spent much time watching, opting instead to bake bread and cinnamon rolls.

“I sealed the overhead to the generator room.”

“Oh? What are you going to use it for?”

“Our armory.”

“But, that means that someone can get into it from the barn.”

“Only if they know the escape tunnel comes from the armory to the barn. Besides, there is loose hay spread over the access hatch to the tunnel.”

“So there’re three ways to do things, the right way, the wrong way and your way?”

“Five. The right way, the wrong way, the Air Force way, your way and my way.”

“You’re pretty fast on your feet.”

“I don’t like sleeping on the couch.”

“It would be more effective if you added some of the dirty horse bedding to the pile.”

“You may be right, I’ll do that.”

“Is that composted manure ready to use?”

“Several garden carts worth.”

“Tomorrow I will finish starting the plants in the green house. I’ve been nursing some strawberry sets. Do you think I should go ahead and plant them?”

“Maybe you should go ahead and plant in the greenhouse. Fresh strawberries sound good.”

“Dinner will be another fifteen to twenty minutes.”

“That will give me time to bring all the firearms up from shelter so I can clean them after supper.”

“I’ll help.”

“Thank you. I want them all clean and ready to go. Did you see the way that one installer was trying to determine the level of our preps?”

“I was in the house. What happened?”

“First, he tried to casually pump me for information. Wanted to know how big the shelter was and how many people it could sustain for an extended period. And then, he wanted to know what we had for livestock. As I said, it had the appearance of casual conversation but Pinocchio had nothing on this guy. It made me think about the eventual necessity of defending the place.”

“You mentioned livestock, are we planning to get something more than the horses?”

One Tin Soldier – Chapter 8

“Do you think your brothers would sell us meat when the need arises?”

“Most likely. It would be nice to have a flock of chickens for eggs and meat. We could get one or two roosters, some brood hens and some layers. There’s ample room in the barn.”

“Those geldings are easy riding horses but I wouldn’t mind a pair of mares. We could truck them to him or he could truck a stallion over here and allow us to increase our riding stock.”

“Tack might be hard to come by. They don’t have any extra that I know of.”

“We can get a Des Moines Yellow Pages and see if there is someone locally who deals in tack. I have rifle scabbards on my wish list.”

“How are your boots holding up?”

“Very well; I only use them when we ride.”

“I need a new pair; add that to your wish list.”

“I assumed you had your own list.”

“Fraid not. Dinner is ready, would you set the table?”

“I’m on it. Want to go to Adel tomorrow?”

“Sure. Ok if we stop by Mom and Dad’s?”

“No problem. How much do you think the horses will run?”

“About fifteen hundred each. Tack will most likely set us back another five hundred per horse. More if we get saddle bags, pommel bags, scabbards and lariats. If you want to play cowboy, it’s fine with me. One question. What are you going to use for a backup piece?”

“My 1911. Maybe in a paddle holster on my right hip. Shouldn’t be too noticeable that way.”

“I guess I’d better go with my P-14 for backup. Enough chitchat; let’s eat.”

“The barn had less dust from the ash than the house did. Um, this is good. Oh, as I was saying, the fact that the barn is new compared to the bungalow seemed to help keep

the ash out. It's going to a while before we can let the horses out, maybe we should hold off on buying more."

"How do you intend to clear the pasture?"

"I don't. Mother Nature put the ash there, she can clean it up."

"I know our planning provided for most events, even if you forgot the gas masks, but this is strange. Everything seems so normal except for the ash in the air and the loss of utilities and communications. I can't believe the east coast isn't functioning at near normal levels because they shouldn't have gotten more than a dusting."

"I don't know about that, my father said they had red snow on the east coast during the dirty thirties."

"What's this grudge you're carrying?"

"In our home there weren't several ways to do things. There were two ways, his way or the highway. I took the highway and never looked back. I picked the one thing I knew he'd disagree with and enlisted in the military."

"Why the Air Force?"

"At the time, they offered the best guarantee and the least danger. Call me chicken if you want, but what we did was important. Much of the manned space flight program evolved from the testing we did."

"Dessert?"

"No thank you. Mighty fine meal and I'm afraid I overate. Let me give you a hand with the dishes."

"I have them. Why don't you check and see if any of the TV or radio stations are on the air? It might be nice to get an update."

"Kristin, WHO is back on the air, apparently fulltime."

"I'm almost done. I'll be there in a minute. Coffee?"

"Yes please."

...and despite concerns that the expansion of the resurgent dome at Long Valley indicated a possible eruption, it didn't occur. Other speculation that the events associated with Cascadia, like a massive earthquake on the San Andreas or Yellowstone erupting failed to materialize. Some thirty plus days into the events, the volcanoes are still erupt-

ing. The volcanoes in the Cascade Range are beginning to slow and the USGS said the eruptions would stop within the next ten days to two weeks.

Mt. Etna stopped erupting last week and Anak Krakatau consisted of the single explosive eruption. The USGS suggests that the series of volcanic activities that traces back to the eruption on Iceland has finally begun to end. There is still limited concern about two of the volcanoes in Alaska and one in Kamchatka.

Current estimates of the total ash output rather small in total volume. The ash reaches to the San Joaquin Valley in California east to mid Kentucky and Tennessee and north from there to Chicago.

Scientists say it will be three to four years before the atmosphere clears to pre-eruption levels. The Department of Agriculture estimates that this coming year's production of crops will be the lowest in eighty years. Governor Culver has suggested that Iowa farms plant cover crops to prevent erosion and forego attempting to produce grains. He went on to say that the limited feed would force the reduction of herds but that the absence of other foods would raise livestock prices.

In other news...

"You want to give me a hand changing the sheets?"

"Ash?"

"Some. I looked at the bed and decided our best bet was to fold the bed covers in over themselves and take them outside tomorrow and shake them before I attempt to launder them. We do have clean sheets, pillow cases and a bedspread."

"Ok. I think we should go ahead and plan on going to Adel tomorrow. In view of what that announcer said, your brothers may be anxious to sell some horses so they can keep more beef and hogs."

"We're not going to take advantage of the situation, are we?"

"No, we'll pay the same as we discussed. My initial concern was that they might not want to sell. Know where we can pick up some decent tack?"

"Do you want the whole shooting match; saddles, bridles, halters, lariats, saddlebags, pommel bags and scabbards?"

"If we can."

"We can, but it will have to be new rather than used. Yes, I know where we can get the things. Remind me to get some gold and silver from the shelter."

“How about I buy the horses and you buy the rest?”

“That’s not fair. Let’s just buy everything first and divide the costs afterwards. It’s going to be a challenge to get hay and grain. I know they won’t have any to spare other than straw for bedding.”

“Do you want to go ahead and get the chickens, beef and pork?”

“I thought you wanted to buy meat from them when the need arose.”

“That was before I watched TV tonight. Maybe we’d better plan on getting our own livestock and shop around for feed. Some farmers are going to have feed to sell and if we pay the same price as the elevators or perhaps a small premium, we’ll be ok on feed.”

“Where are you going to store it?”

“I thought we might stack the hay and straw outside covered with tarps and store the grain in the barn loft. Do you think that will work?”

“It will take a minor amount of reconfiguring the loft, but we can make it work. We’ll need to get a grain elevator from someone close to get the grain up there.”

“Sounds like we’ll be busy for a few days.”

“You can rest when you die, Jason.”

We spent two hours visiting her folks and went out to the farm. They had three mares with foal they were going to have to unload. Kristin and I said we’d take them off their hands for a reasonable price. That deal was quickly struck and the conversation turned to hogs, chickens and beef. We could get a feeder beef and a bred cow plus two bred sows and they would deliver all of the livestock in a single trip. Since we didn’t really have a place for chickens, they’d set them aside until we got a chicken yard and hen house. Gold and silver was fine and we paid for everything.

With the size saddles the three mares needed written down, we headed for Perry to buy the tack. The gear was relatively plain and great quality. He said he didn’t get many calls for scabbards but had a few in stock for some locals into Single Action Shooting. We got three scabbards for each horse, one for the 1895, one for the 1894 and a third for a coach gun. The pommel bags had holsters for 5½” revolvers. On the way home, we stopped in Des Moines and picked up four Ruger Vaqueros (old model) with 5½” barrels in .45 Colt and a Pioneer Arms coach gun (imported) for Kristin.

We stopped in Ankeny to eat, but the Maid Rite was closed. Kristin said we’d just cook the stuff we had in the freezer, so we went home. She set out a package to thaw with the microwave and I unloaded the tack into the garage in the stall with the generators. Despite her comment about my playing cowboy, I had no intention of doing so for the

moment. I was concerned about the long term effects of the ash on our vehicles and the horses would provide an alternative means to move around. It started sprinkling while I was putting the tack away and by the time I finished, it was pouring.

“It’s raining cats and dogs.”

“Didn’t happen to see a Siamese, did you?”

“You know what I meant. The ash is absorbing the rain and swelling but it’s coming down so hard that it’s being washed into the ditch.”

“There’s not enough on the roofs to be a problem is there?”

“No, I hosed them down yesterday so there was almost no ash on them. The rain will clear anything I missed. I put the tack in the garage stall with the generators. Maid Rites or tenderloins?”

“I decided on tenderloins since I’m using the deep fat fryer anyway. Less mess to clean up.”

“Paper plates are fine with me. All we’ll have to wash up is the coffee cups.”

“Why don’t you see if WHO has a weather report?”

I washed up, set up the TV trays and turned on the TV. WHO was using that running scroll along the bottom of the screen and it pertained to the weather. A system had moved in and stalled. We would receive heavy rainfall for at least two days and possibly as many as five. I got lost in thought wondering what that would do to our small five acre plot. I was more than certain that the ditch couldn’t possibly hold all of the ash and rainfall.

“What did they say?”

“Two to five days of heavy rain.”

“Good, that should clear the pasture and around the buildings. The Skunk River is going to be more mud than water.”

“I hadn’t thought about that. I was worried the ditch wouldn’t hold the ash and rainfall.”

“I could be wrong, but this rain should help clear the air and wash a fair portion of the ash off our acreage.”

“If it does, we may be in better shape than I imagined.”

“Tomorrow we need to go shopping.”

“What do we need?”

“A hen house and some fencing for a chicken yard. The chickens all have their wings clipped so they can't fly. Wing clipping is where you clip the primary flight feathers on one wing with sharp scissors. Clipping one wing puts them off balance but still allows them to fly a little. You may need to do this if your chickens are likely to be able to fly away over a fence, but bear in mind that it will also make it harder for them to fly away from any predators.”

Back to what I was saying about being a cowboy. I could maybe see the six gun and all of those trappings if we lived in Texas, New Mexico or Arizona. You have to deal with rattlers, people sneaking across the border and who knows what. Iowa is ...civilized, whatever that means. CCWs are 'may issue' until the new law is in effect. Centerfire rifles are legal to own but not to hunt with. Lots of old Damascus barreled shotguns floating around. Kristin and I may not be sniper trained but we're most certainly sniper equipped and sniper qualified, very good rifles and excellent optics.

The next morning after I tended to the horses, we set out in the midst of a pouring rain to get a hen house, fencing and etc. She directed me to a lumberyard in Ankeny where they had prefabricated buildings. Their largest, a 12'x18' would do as a hen house and they would deliver. She used her debit card. Our next stop was a farm supply where we got the T-posts, wire, a post driver, wire clips, staples, a post hole auger and 8 cedar posts. Pretty much filled the empty space with bags of chicken feed and tarped the load.

I checked the barn when we got home to see if the livestock had been delivered. It hadn't. There no way I was going out into that downpour to put in fence post holes or drive fence posts. It didn't rain 40 days and 40 nights, just 5 nights and 4 days. It finally stopped and I was able to let the horses out and clean up the barn. I went up into the loft to see what needed to be done to store grain. All it would take is some plywood to divide the space if we wanted to keep the grains separate. If we mixed them, all we needed was something around the loft access that would hold the grain back until I shoveled it over. I figured three sheets of 3/4" plywood and some 2x2s for the corners. I'd just extend the ladder higher.

Visibility was greatly improved, 2-3 miles. Kristin said that WHO announced that coal was being brought in from West Virginia, Pennsylvania and Kentucky. Expectations were that power would be restored within two weeks. Part of the delay was due to bringing the grid back online in sections. There was enough coal available now. It was time to change the oil in the Kohler a second time and I went around and made sure that only the critical systems were powered.

I fired up the 12.5, let it synchronize and shut down the Kohler. I had to let it cool some before I could work on it. I went ahead and opened the empty drum and added the funnel. Then, I lined up the replacement filters and measured out nine quarts of oil. I checked the radiator and topped it off with 50/50. I replaced the air filter and fuel filter

and then, wearing my leather gloves, drained the oil and replaced the filter. I added the oil, double checked everything and fired it back up. When it was synchronized, I shut down the 12.5 and drained the Kohler oil filter into the drum. If I mention this again, I'll just call it the 500 hour oil change.

It took a bit longer than anticipated to get the power back up and I had just done the third 500 hour oil change when the ATS shut down the generator. The way they had it wired, regardless of which generator was running, they were shut down when the power came back on.

"We have the power back."

"I know, mother called."

"Something going on?"

"They're bringing the livestock tomorrow."

"Couldn't put another bushel of grain in the loft and that hay is on pallets and tarped. I hope they bring the straw."

"They are. Separate truck, but they're bringing a truckload. Is the fence finished?"

"Sorry, forgot to tell you. I finished it yesterday. I built the nesting boxes and used some of the last straw for the bottoms."

"Do you think we can plant a garden this year?"

"Oh, we can plant one, but is there enough sunlight for it to produce? We may have to settle for what we can get from the greenhouse. That was why we invested in it after all, for those just in case situations."

"Apparently we got off luckier than some countries. Northern Europe, Russia and northern China crop forecasts are way down. I didn't pay much attention until I heard the guy refer to Russia and then China. Russia can trade oil, gold and diamonds for food but what will the Chinese do? Let's face it, US demand for Chinese products will be way down until we recover from the eruptions."

"Now you have some insight into what I said about the causes of wars."

"You said famine was a cause."

"I don't have a crystal ball but I'd hazard a guess that if China's population begins to starve, their government will do whatever it takes to feed the people."

"But a nuclear war would be counterproductive."

“Yes and no. It would reduce the available food but it would also reduce the demand for food. The US will be growing more each year starting next year. The Chinese can raise an Army nearly the size of our population. If they chose to invade rather than use nukes, they might be able to gain a foothold and grow food.”

“You can’t believe that, not really. Seventy-five million Americans would be up in arms and fight any invasion every step of the way.”

“If they invaded, it would be the west coast or perhaps through México like some of the writers suggest. It could end up like what Jerry D. Young talked about in *China Gamble*. Just be aware that other outcomes are possible. How many illegal Hispanics are in the US? Enough to make an army that would reduce the effectiveness of homegrown efforts?”

“What do you think?”

“I don’t know. I’m not some punk kid fresh out of high school anymore. In case you haven’t noticed, I’ve had to curtail my efforts at conditioning.”

“You still work out.”

“Not as much as I used to. I spend the same amount of time, but I’m slower.”

“After we get the stock, I want to go for a ride. We can hang the scabbards and see how that works out.”

“Good enough. I’m going to wear my slicker in cases it rains. It will also hide my 1911.”

“You’d just better hope your friend Deputy Dog doesn’t catch us. You know the law as well as I do and any loaded firearm would be a problem.”

“I forgot... we’re civilized. We were lucky to get matching Pioneer Arms coach guns.”

“Lucky maybe, but that was a lot to pay for a shotgun.”

“That ounce of gold barely dented our supply.”

“That’s not the point. We have what we have because we don’t spend it the minute we get it. By the way, the internet is up. The spot price for gold was hovering around two thousand.”

“That will change as the food supply dries up.”

“It’s strange you should say that, More than 1,000,000 persons in southwest China are reported to be affected by a famine in 133 counties in Sikang, Yunnan and Szechwan

Provinces. The famine was still spreading and many persons were committing suicide because of cold and starvation, according to news reports. Add the loss of crops in other areas within China and the scenario you describe is frightfully possible. If their neighbor to the east gets involved because of it, a war seems suddenly plausible.”

“How do you envision that occurring?”

“If China has food problems as does their major ally in the region, North Korea, don’t you see how that could lead to a fight for control of the food resources?”

“But what does that have to do with us? An invasion of the US seems more probable.”

“Either way, it could unlock the triggers on the nukes. I can’t imagine what would happen if we somehow got involved.”

“You don’t suppose we could find a source to fill the newly developed holes in our long term preps?”

“We could try the local elevators for corn and oats. Some of the health food stores might carry bulk wheat and we have more beans and rice than we could eat up in ten years. If you want to go that way, I’d suggest doing what we did before the eruptions, Costco, Sam’s Club and Hy-Vee. The only alternative to that would be to take I-35 to Oklahoma City and cut west to Las Vegas. From there, we could take I-15 to Orem and Montpelier.”

“I’d hate to be away from home for that long. Let’s do it the way you first suggested. I do know where to get the wheat in the area and there’s a food co-op up in Ames. We can go tomorrow after they drop the livestock off. I know you wanted to go riding and I hate to postpone that for a day, so it’s up to you.”

“I’ll call mother and see if they can bring the chickens tomorrow too. Can you think of anything else we might need?”

“I used the last tarp coving the hay and I’ll need one to cover the straw.”

“I’ll add Tractor Supply to the list of stops. We can look around for chicken feeders and waterers plus appropriate tanks for watering the cattle and hogs.”

“I called the farm. Robert wasn’t there so I spoke to James. He said they had a couple of cages and would bring the chickens. They would check the wings and re-clip as required. He said they were concerned about a possible war due to food shortages both here and abroad. I told him we already had hay, corn and oats. He asked if the rain cleared the pasture and I explained how the rain washed most of it into the ditch and from there into the river. He mentioned that they had four sawbuck pack saddles just

taking up space and they planned to give them to us. He said they'd be here by nine at the latest."

"We should be able to leave by ten. Add a pharmacy to the list for first aid supplies and OTC medicines."

"You want anything from Maid Rite or a restaurant supply?"

"How much Maid Rite, tenderloins and fries do we have on hand?"

"I'll have to check. If we need anything I'll add it to the list."

"If the restaurant supply is handy, two one gallon jars of the thinly sliced pickles. Would they carry other kinds of beans? Great northern, navy, kidney and small pink?"

"We'll stop there too. They have the pickles for sure."

We purchased a 2'x1'x4' tank for the hogs and a 2'x2'x4' tank for the cattle plus two float valves.

Costco was similar to our previous stocking trip as far as dairy and meat products except we added two more pails of oil, extra paper towels and bath tissue. We bought 4 100# sacks of flour, 100# of sugar and 60 cans of Folgers, four bags of rice and eight bags of pinto beans. Kristin went back in and checked their pharmacy and got what we needed there. She added more spices and mixes and ten six packs of Hormel no bean chili for chili dogs.

Sam's Club was our source for a half a dozen different types of pasta and ten cases of pasta sauce. We ran the aisles picking up other items here and there. That had us down to Maid Rite and the restaurant supply. It was a full day and we were up until ten just unloading and putting everything away. Kristin pre-heated the oven and got a pizza from the freezer. It was cold out and we set the box of pork loins on the back porch to deal with the next day.

We were halfway through slicing and packaging the pork loins when a car pulled in.

"Jason, it's you buddy Deputy Dog."

I grabbed my jacket and went to meet him, overlooking the fact that I had on the .45 in my paddle holster.

"Now what?"

One Tin Soldier – Chapter 9

“Nothing bad and I’m sorry about last time. I was a little on edge over Yellowstone. I figured I owed you and decided to pass along some information that’s being passed out to law enforcement agencies around the country. The Sheriff ok’d me telling you and said if you can get to the office in Nevada, he’ll issue you CCWs.

“We received an advisory from Homeland Security. It warned of possible attacks against the infrastructure as the first step of an invasion along the Pacific coast and across the Mexican border. National Guard forces are being activated in every state and are going to either the border or west coast.”

“Did they say why they suspected an invasion?”

“It wasn’t in the advisory. If you want my two cents, the Chinese are desperate to feed their population. Since you’re a prepper, I wanted to give you a heads up.”

“Prepper?”

“Survivalist. You know what I mean. Where’s your shelter, in the basement or under the garage?”

“What gave you that idea?”

“Come on now, you couldn’t be more obvious if you ran up the stars and stripes on your barn. Besides, firearms transactions involving five or more guns are reported to the ATF. I told the Sheriff we’d met and you were ok. He ran the background check just to be sure and is holding the CCWs. All you need to do is fill out the paperwork. Your significant other needs to demonstrate completion of a firearms familiarization course. She can do that in the office by field stripping and reassembling her handgun.”

“Do you have time for a cup of coffee?”

“If it’s not an imposition, thanks.”

“Kristin, this is Deputy Lawson. He came by to check our weapons purchase and to give up some information they received from the DHI.”

“DHI? I said DHS.”

“Do you feel secure? I don’t. So I refer to them as the Department of Homeland Insecurity.”

“You may have a point.”

“Cream and sugar?”

“Black, please. I take it that you have more firearms that you mentioned last time.”

“A few more.”

“A Barrett?”

“No, we have a McMillan Tac-50 and a pair of M1A Super Match rifles; all with extremely good optics.”

“That’s about what I figured. Are you any good?”

“One thousand meters with the M1As and 1,500 meters with the Tac-50. Couldn’t find a longer range to use.”

“What do you have for sights on the standard model M1As?”

“ACOGs.”

“You have a lot of money tied up in your firearms, don’t you?”

“We do, for a fact. We have horses, too.”

“I saw them in the pasture. I don’t remember seeing hogs and cattle the last time I stopped. New additions?”

“Yes, and we added chickens.”

“Excuse me; did you say your name is Lawson?”

“Yes ma’am.”

“May I ask what your father’s name is?”

“It’s John, but he goes by Jack.”

“Your grandfather wouldn’t happen to be Robert Lawson?”

“Yes it is. He died about 3 years ago. What’s your interest, if you don’t mind me asking?”

“What’s your mother’s name?”

“Cheryl. Now are you going to tell me what this is about?”

“I was your father’s first wife.”

“I didn’t know he was married before.”

“Four years. If you will excuse me, I have something I have to do.”

“Do you know what she’s talking about?”

“I do. It’s not my place to say. You might try asking your mother or father. I seriously doubt Kristin will tell you. We’ll drive up to Nevada later today.”

We filled out the paperwork, Kristin did the demonstration and we were issued our CCWs. We then met with Sheriff. He was thinking about a plan to create a Special Posse of Reserve Deputies under the guise of a Search and Rescue unit. Members would be sworn officers with very limited authority. They’d work on Amber Alerts and as a militia if needed. Each member would be required to provide a handgun, shotgun and rifle and qualify with all three weapons. Additional training would be provided for anyone who needed it, but he was trying to select only combat veterans. Kristin and I would be exceptions to the rule if we were as good of snipers as Deputy Lawson indicated.

It’s about 2,300 miles from Mason City to Edwards, I drove it once. If an invader made it all the way to Des Moines, they’d have half the country under occupation. Kansas, Missouri, Iowa and Illinois would be their destinations due to the average farm output. Still, they would be deep inside hostile territory. I knew we weren’t the only people in the area with M1As because a gun store in Des Moines, Smith’s, sold them. As far as it goes, any decent 7.62x51mm rifle would be perfect in an area like Iowa. We thanked the Sheriff for sharing his idea and told him we’d keep it in mind. Probably in that back corner where we store various crackpot ideas. That’s not the same as dismissing the idea entirely and it wasn’t tinfoil hat time, yet.

“What do you think, Jason?”

“I’ve heard crazier ideas. Patton’s dead. The Chinese couldn’t move 100 miles in 48 hours if their lives depended on it.”

“What are you talking about?”

“Patton relieving the 101st at the Battle of the Bulge. Surely you saw the movie?”

“Pompous SOB.”

“Yep. Bradley and he didn’t get along quite as well as the movie suggested. He got along better with Ike. You know if we applied for CCWs, the Sheriff would have probably turned us down.”

“Probably. Even with CCWs, it doesn’t change a lot...we’re civilized.”

“You make it sound like a dirty word.”

“I don’t know why I came back. I’m glad I did, since I met you; otherwise I’m not so sure I wouldn’t have moved to Arizona.”

“Arizona? It’s hotter than Hades in Arizona.”

“I know. That’s the only thing that held me back. I took a week’s leave once and checked out Tucson, Tombstone, Phoenix, Sedona and Prescott. It was the last week of July. Never went back.”

“This war talk; do you really believe it will happen?”

“I don’t know if it will happen. It has been possible since the late 1950s when I was in high school. To date, only two nuclear weapons have been used in a war, in 1945. I don’t believe those figures we see in the media about Russia and the US only having 2,200 weapons each. Given that, even those weapons would be enough to wipe out a large proportion of humanity.

“Do you know how many weapons we have?”

“Twenty-two hundred?”

“Try ten thousand six hundred and forty. Dubya claimed they were doing something like seventeen hundred and I don’t know what became of that. Even if you take out the four hundred for the ground launched cruise missile, that leaves ten thousand two hundred and forty. And, I bet they have some in reserve that aren’t counted in that total.”

“But that’s good. We have more than they do.”

“If we’d lie what would you do in their place?”

“You have a point.”

“Do you know how many warheads we have on our boomers?”

“No, but I’m sure you’ll tell me.”

“Twenty four missiles per boat, eight warheads per missile equals one hundred ninety two per boat times fourteen boats equals two thousand six hundred and eighty-eight. That more than the new agreement will allow. The boomers are the edge we have to keep everyone else in line. Those Chinese maybe have two or three missile boats, the Russians one old Typhoon they don’t use. Our Ohio class boats are keeping the world safe.”

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Tactical weapons include not only gravity bombs and short-range missiles, but also artillery shells, land mines, depth charges, and torpedoes for anti-submarine warfare, with nuclear warheads. Also in this category were the former nuclear-warhead surface-to-air missiles (SAMs), ground-based or ship borne and air-to-air missiles. Small, two-man portable, or truck-portable, tactical weapons (sometimes misleadingly referred to as suitcase nukes), such as the Special Atomic Demolition Munition, have been developed, although the difficulty of combining sufficient yield with portability could limit their military utility. In wartime, such explosives could be used for demolishing “choke-points” to enemy offensives, such as at tunnels, narrow mountain passes, and long viaducts.

Other new tactical weapons undergoing research include earth penetrating weapons which are designed to target enemy-held caves or deep-underground bunkers.

The yield of tactical nuclear weapons is generally lower than that of strategic nuclear weapons, but they are still very powerful, and some variable-yield warheads serve in both roles. Modern tactical nuclear warheads have yields up to the tens of kilotons, or potentially hundreds, several times that of the weapons used in the atomic bombings of Hiroshima and Nagasaki.

Some tactical nuclear weapons have specific features meant to enhance their battlefield characteristics, such as variable yield which allow their explosive power to be varied over a wide range for different situations, or enhanced radiation weapons (the so-called “neutron bombs”) which are meant to maximize ionizing radiation exposure while minimizing blast effects.

The treaties didn't apply to tactical nuclear weapons.

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“We missed the end of the world you know.”

“No, I must have missed that because I was concentrating on a possible war. What are YOU talking about?”

“Planet X. The Mayan Calendar ended on December 21st, 2012 and some thought that signified the end of the world.”

“Nah, they just started the 14th long count Calendar.”

“So you did know.”

“I saw the show on Mega Disasters or a similar program. Believe none of what you hear and only half of you see. I'm still holding out for weapons of mass destruction. Nukes, chemical warfare or biological warfare.”

“So, you’re glad you came back home?”

“Well...think about it. Would you want to live in Arizona in this day and age? This illegal immigration problem is only getting worse. A couple of years back the President of México addressed Congress and blamed all of their problems with drug traffickers on the sunset of the Assault Weapons Ban. I really thought Obama was going to call for a renewal of the ban.”

“Why didn’t he?”

“I think he was afraid he wouldn’t get reelected.”

“He didn’t.”

“You and I know that, but he didn’t at the time. Considering his ranking in the polls, I’m surprised he got 37% of the vote. You know, I read an article at the Bulletin of Atomic Scientists just after they signed the new START Treaty. The guy said:

After missing more than a few deadlines and achieving several so-called significant breakthroughs, the United States and Russia finally have reached an agreement on a new arms control treaty. It will be signed in Prague on April 8, almost a year to the day US President Barack Obama and Russian President Dmitry Medvedev agreed to begin treaty negotiations and Obama announced, also in Prague, his commitment to a nuclear-weapon-free world.

So, was the treaty worth the wait? As a disarmament measure, it will be a very modest step. The treaty will set a ceiling of 1,550 deployed nuclear warheads-technically a reduction of more than 30 percent from the current levels-but almost all of the reductions will be accomplished by changing the way the warheads are counted. That means most of the warheads will still be in the US and Russian active arsenals.”

“So there are probably more weapons than anyone is admitting. Another thing...it’s called START because it only relates to strategic weapons. That totally ignores tactical weapons.”

“What do you want to do, live in the shelter for the remainder of our lives?”

“Not really. Just make sure your NWS radio always has fresh batteries.”

There are upsides to bad events. Volcanic winter halted global warming, at least for the moment. That, in turn, kept the Gulf Stream from sinking, for now. I rather doubted most people cared about global warming because they were too busy trying to line up their next meal. Meanwhile, we continued to turn a fair share of our incomes into commodities. No, not the market, real commodities like 6 gallon pails of grain, beans, rice, coffee and toilet paper. Every chance we had to get a good deal on ammo, albeit at a

greatly inflated price, we spent the money. We ran out of storage room although we weren't parking vehicles in the garage because the garage was full of commodities.

"We need a storage building Jason."

"You're right. It sure would be nice to be able to park in the garage. Any ideas?"

"One. How about a three story building with a basement, main floor and second floor. We can store the ammo in the basement, medium weight goods on the main floor and lightweight goods on the second floor."

"Frame construction?"

"Reinforced concrete. And, I'm not just talking about rebar. There are all kinds of additives a person can have added to concrete. Some make it stronger, some make it more flexible and some make it dry faster.

"How big?"

"Same size as the one we have, 24'x24'."

"Turnkey?"

"It would have to be, you can't work like that anymore. We could mount PV panels on the top, too. I'd be willing to let go of some of my gold to make it happen."

"We'll go fifty-fifty. Might be a good time to unload a little gold."

The garage turned out to be 24x24 inside or 26x26 outside due to the foot thick reinforced walls. We figured the closest target was Des Moines and built accordingly. A manual lift was included to ease the burden of taking things to the basement and second floor and back, later. A large portion of the basement was taken up with large 2.2v batteries at about three grand a pop. We would have lights for thirty years, depending on the photovoltaic panels. There were 26 of the batteries including two spares. Weight 1068 lbs. with acid; 900 lbs. dry; 14"x14"x58" high; fiberglass case for extra strength; 22 gallons of ordinary auto battery acid (available in most cities for \$1.50 per gal.); all new cells shipped dry on pallets FOB Brockton, Massachusetts. One truckload halfway across the country.

We bought four pallets of 21 Suntech 280w Polycrystalline Solar Modules. They were installed by pros and tilted at an angle that would produce the highest average annual power output. We agreed we'd probably never recover our investment. However, we'd always have power and we could use one or both of the generators to charge the submarine batteries. The maximum power output was 23,520kw. The batteries held 7,000 amps each for a total of 168,000 amps which is a lot of kilowatts at 120/240 volts. We had enough charge controllers and inverters to meet our demands, up to and including

105+150=255 amps. We weren't really sure why, but it was only money and we were aging and we couldn't take it with us. How much does a pallet of PV panels cost? About sixteen grand; around \$3 a kilowatt.

One of the reasons that people save and accumulate in their youth is so when they get old and can't work, they have the money to hire it done or buy what they need to make life simpler. My fifty year old pickup and Kristin's 50 year old car were doing just fine. Parts were getting hard to find, but we made a list and gave it to one of those auto salvage places that was connected to places all over the country. We got spares and had them rebuilt and added them to storage, just in case. Spare everything, engines, transmissions, brake drums, brake pads, starters, generators, fuses and so on. Front ends dismantled for parts and put up. Shocks, spark plugs, filters, voltage regulators. If it went on the F-100 or the Comet, we had it. Plus new tires sealed up like in the story, *The Fifth Key*. We even had parts kits to rebuild the engine or transmission we replaced.

"We've been together for almost twenty years. Why is it that every time I bring up marriage you change the subject or indicate in some way that we should leave things as they are?"

"When was the last time we had a fight Jason?"

"We've never had a real fight, have we?"

"No, we haven't. Any more questions?"

"You didn't answer my question. All you did was ask another question. Is there a lesson there that I'm missing?"

"Yes."

"Well, are you going to tell me what the lesson is?"

"Think about, it will come to you."

"We don't fight because we're not married? Is that what you're saying?"

"Eureka!"

"We've not always agreed."

"That's true, but it never turned into a fight because neither of us would push it to that point. Jack had the attitude that he owned me. I was obligated to be faithful to him but he wore a different set of shoes. In case you're wondering, I've been faithful to you since I moved in. I'm more than certain that you've been faithful to me."

“You know it.”

“The marriage vows are to love, honor and cherish, keeping yourself only to your spouse. We’ve managed to do that for almost twenty years. Why ruin a perfect relationship?”

“I do love you, you know.”

“And I love you Jason. Let’s not screw up a good thing.”

It occurred to me that whenever there had been a disagreement, and there had been more than a few, we worked through them, somewhat fearful of losing the other because there would be no dissolution involved. It was thoroughly practical. What did people do before they had people to perform marriages? Interesting thought. However, a relationship based on fear wasn’t much of a relationship. This definitely requires more study. I checked. The first recorded marriage laws were part of the Code of Hammurabi, circa 1,800BC. So were the first liquor laws. Do you suppose there’s a relationship?

It seems that King Hammurabi had all kinds of problems in his kingdom, Babylon. So, he had his scribes write down the Hammurabi Codex. It was a far reaching set of laws that touched on a bit of everything, including marriage and the hours of operations for bars. Carved in stone, literally.

It took the other countries about a year to realize how bad they had it and develop solutions. The solutions invariably were some form of take what we need from someone who has it. You know, like the Japanese did in the 1930s and early 1940s. Our country was digging itself out, sometimes literally, and the air was just a little clearer each day. The ash that had been incorporated to the soil was very fertile and when blended with existing humus and a bit of water, produced increasing yields.

Three years after our country and other parts of the world blew themselves up we were meeting all of our needs. The Department of Agriculture was saying we’d have exportable amount of grain in a year or two. Baby boomers are the same the world over, they want it NOW, not in two years.

The illegal immigrants who have decided that they were better off south of the border changed their minds a second time and decided to come north again. That proved to be harder than they had imagined. California, Arizona, New Mexico and Texas, with the assistance of .gov, built a real fence. It sort of looked like the Berlin Wall in news photos. I was pretty sure that was real razor wire on top, too. On top of that, they had towers about every two miles, over 1,500 of them. Each was ‘manned’ by a Border Patrol Agent with FLIR or something similar. They could see them approaching the fence from miles away and on the off chance that one of them managed to get to the top and through the razor wire, a nice warm set of handcuffs were waiting.

Spaced along the wall at intervals were National Guard units, although I couldn't really understand why. We weren't hearing much from the Minuteman Movement these days. Maybe we couldn't stop them from trying to cross the border, but we sure could prevent any attempt being successful. I hear they may be taking the Lazarus inscription off of the Statute of Liberty. You know that one, right?

*Not like the brazen giant of Greek fame, With conquering limbs astride from land to land; Here at our sea-washed, sunset gates shall stand A mighty woman with a torch, whose flame Is the imprisoned lightning, and her name Mother of Exiles. From her beacon-hand Glows world-wide welcome; her mild eyes command The air-bridged harbor that twin cities frame. "Keep, ancient lands, your storied pomp!" cries she With silent lips. **Give me your tired, your poor, Your huddled masses yearning to breathe free, The wretched refuse of your teeming shore. Send these, the homeless, tempest-tossed to me, I lift my lamp beside the golden door!***

Emma Lazarus, 1883

(emphasis added) The Greek reference is the Colossus of Rhodes.

We're sort of full up with refuse at the moment and are having problems with our own homeless. Besides, it's copper not gold.

"We need to get to the range and practice."

"You go ahead. Shoot once for yourself and once for me."

"Come on Jason, this isn't like you."

"That Tac-50 has been gaining weight. We may have to put it on a diet."

"It still weighs 26 pounds plus the scope."

"It must be the ammo."

"That's still about 5 ounces a round. Your problem is that we haven't anything really exciting happen since the volcanoes blew. We still need to be ready in case the Chinese invade or something."

"They built that wall on the border; the Chinese can't get in that way."

"One round of 125mm would change that in a heartbeat."

"I'm tired; taking care of the sows, the cattle, eight horses and all those chickens are wearing me out."

One Tin Soldier – Chapter 10

“The exercise will be good for you.”

“I’m not going to win this argument, am I?”

“Nope. You should be in good shape from moving all those goods from the garage to the new storage building. That reminds me. I ordered two gross of cases of canning jars.”

“That’s over three thousand jars!”

“They don’t last forever. I broke one just the other day.”

You know all those shelves I mentioned that we had in the basement and the shelter? It seems Kristin got concerned about the New Madrid Seismic Zone and I had to add a 1”x4” across the front of each shelf so the shaking wouldn’t knock the jars off. I had to leave a 1” gap at the bottom to keep the jars on the shelves. The shelves also had to be anchored to the walls. It was actually a good idea but do you know how many shelves we had? You’re wrong, part of what we had stored in the garage was, you guessed it, shelving. It was a cross breed type of shelving, metal legs with wooden shelves.

“You need more practice Jason. Once a week until you are back in top form.”

“But...”

“Don’t worry about it; I got more Match grade ammo. We should take all of our brass to someone who can reload it to Match specs using the Hornady A-MAX bullets. I’ll look into it while you’re taking care of the livestock tomorrow.”

Since the Mk 211 has been mentioned and I implied that we lost our source, do we still shoot it? Do we have a replacement source? Yes and no. Our supply is slowly dwindling. Based on my shooting performance on this day, Kristin wouldn’t let me shoot any of it. We tried to limit use to five rounds or less, just to verify the sighting. It doesn’t shoot to the same point of aim as the Hornady so the scope adjustments are in our range books.

Someday when I have the money to waste, I’d like to take a 55 gallon drum of gas and shoot it with one of those rounds just to see what would happen. It would be interesting because the round is HE, high explosive, I, incendiary, AP, armor piercing. The HE and I effects would be in play when the slug was about halfway through the drum. I envision two possible results, the first spectacular, a huge explosion and the second disappointing because there wouldn’t be enough oxygen mixed with the gas. I’m fairly certain that a half filled drum would explode if I hit it above the gas.

Note to self: AIM Surplus has more Radway on stripper clips, mid to late nineties. Proper stuff for the standard model.

I'd finished off all of my South African target practicing and all I had these days for my standard model was Radway. Kristin had a small amount of the German ammo left, but the bulk of hers was also Radway. We had accumulated quite a few CMI mags, all 20-rounders. Every time it looked like they were going to outlaw something related to firearms, we bought magazines and ammo or more firearms. I haven't mentioned it, recently anyway, but I said I had two 7.62 suppressors, one for my standard and one for my Super Match. The standard now had a flashhider with a bayonet lug and Kristin has the suppressor on her Super Match. But her standard also has my other bayonet lug so we're sort of even. And, I still don't want to get close enough to use a bayonet. We got the last of the Radway AIM had and Kristin found someone to load the Hornady Match ammo. We thought we were walking in high cotton.

Food had gone through a wide swing in prices. After the volcanoes, it was difficult if not impossible to find. Oh, we had the one trip to Costco, Sam's Club, Hy-Vee and the restaurant supply just like I said. Not long after we stocked up, you couldn't get food for love nor money. Beef prices started to creep up as the supply dried up. The same happened to pork and chicken although slower. Eventually the only sources of protein were what you grew or vegetable protein, like beans.

The second summer it began to switch and the third summer we're where we are. With two freezers full, we didn't want for anything. I expected we'd have to patrol the five acres on horseback to keep people out. However, our large garden wasn't visible from the road and we used heirloom seeds, so nobody, other than family, knew how much food we actually had. Packed the way it was, the bacon and butter stored perfectly fine in the freezer until we needed to use it. Kristin's careful canning habits paid off big time and either that or those new lids kept the food well past two seasons.

We provided her parents with garden produce, both fresh and canned, and her brothers provided them with meat. When we had a beef and two hogs butchered, we gave them all their small freezer would hold. The premium food item turned out to be coffee with a 57 ounce can of Folgers going for \$14.99 when you could find it. We didn't even look; we had enough for several years.

But, as I said, famine was spreading around the globe and it wasn't limited to third world countries. The real concern all along, in our minds at least, was the Chinese. They were starving before the events and now they were well along with whatever solution they had devised. The new Republican President continued Obama's policy of winding down the foreign wars. I was sure he would leave troops in Germany and South Korea, but he pulled every last one of them, including liaison personnel. They got leave when they returned home and were quietly moved to the Mexican border to replace the National Guard units. The National Guard units were then redeployed to the west coast along with the troops from Korea and Germany.

Lake City ammo had begun showing up at AIM, Ammoman, Ammunition to Go and several of the online ammo dealers. It disappeared and it was Wolf, Serbian or do without. You could still get Black Hills but it was right up there around \$2+ a round. The Black Hills factory had a terrible time digging out from the ash and their prices reflected that plus the sudden shortage. We got some of the last 175gr Match HP. Hornady had some 168gr A-MAX and the heavier 178gr bullet was A-MAX Match and we didn't have any experience with it. We elected to shop around for more of the Black Hills and got 2,000 rounds from MidwestUSA for \$722 per case plus shipping. I drove down to Columbia, Missouri and picked it up

You realize, I assume, that we were having a large number of .50 caliber rounds reloaded. She got the best price she could...but still, I almost choked when she told me what it cost. I'd originally been buying 50 rounds at a time at about six bucks a round. The guy was turning out about 200 rounds a week so it would take a while. The first indication of an attack was the detonation of three enhanced radiation warheads.

Space Command tracked them and reported them to the President. They also reported that the warheads weren't on a trajectory for any US city. The US held fire until they detonated at 400km altitude. A one for one proportional response was then ordered, all targeting Beijing. The missiles had been launched from Chinese submarines.

Satellite orbits were modified slightly and we learned that the DF-5As not in silos were erect and being fueled. A second strike was ordered for those sites, cutting the available long range Chinese missiles to those housed in silos. Estimates of silo based DF-5A was uncertain with the minimum estimated at four and the maximum estimated at fourteen. There was also some dispute about the size of the warheads, initially thought to be 5mT and more recently 2mT. The same source reported that none of the missiles were MIRV'd.

Both the US and Russia were probably at an Alert Status or Defense Condition of One. I had to move the chickens to the barn two pairs at a time and absent a cage, they had full run of the barn.

"Everything is set in the barn."

"Help me move the food to the shelter if you would. I packed two suitcases. The only guns in the house are our carry guns."

"Did you perchance check to see if the PV panels are still working?"

"I haven't had a chance. I'll check them when I come back from delivering the first load."

"Don't dawdle. "

"What?"

“Get your butt in gear.”

“What next?”

“Are the PV panels working?”

“Like a charm.”

“The guy we have doing the reloading delivered the ammo and I wrote him a check.”

“Is it a good check or will it bounce?”

“It really doesn’t make any difference, but it’s a good check. Take those boxes to the shelter and come back for the last load. Wait. Make it two loads, the suitcases.”

“Ok, what next, the suitcases or something else?”

“I’ll take two boxes from the kitchen and you take the other two. While I’m putting everything away, you can get the suitcases and lock us down.”

I dropped the next load off in the shelter and headed back to the house to get the suitcases. A car was sitting in the drive on the other side of the gate. It was Deputy Lawson with his wife and two children.”

“What’s up Deputy?”

“Is there any room in the Inn?”

“Hold on. Kristin, Deputy Lawson is here with his family. Do we have room to house them?”

“Ask if they brought anything with them.”

“Well, Deputy?”

“Extra clothing, the food from our pantry and two coolers of frozen meat and vegetables. Oh, plus my firearms and ammunition.”

“Did you catch that?”

“Yes. I suppose you’d better let them in and move their things to the shelter.”

“She didn’t sound enthusiastic.”

“We’ll discuss that later. For now, move around behind the garage and park. I’m grabbing two suitcases and will help you unload.”

It didn't take long to move their possessions. The boxes of food were typical pantry items plus a few things probably picked up when they were on sale. Both the Deputy and his wife had tears in their eyes.

"I don't know how to thank you."

"That's easy, just say 'Thank you'. For the moment avoid discussing your father and mother. If Kristin won't explain, I will but you have to keep your lips zipped. Let's get your weapons and ammo put away in the armory. Wouldn't want one of the children playing cowboy and Indians with a real firearm."

I unlocked the door to the tunnel to the old generator room slash new armory.

"You weren't kidding when you said you had a few more firearms."

"The room over there will be for you and your wife. The next one over for your children. Both are set up with bunk beds, we can unstack them if you want. Didn't catch your wife's name."

"Melody. My son is David Jr., I'm David and our daughter's name is Cheryl. Is there anything about the shelter that we should be aware of?"

"Not really, it's just your average well-built and supplied storm slash bomb slash fallout shelter. There are PV panels on the roof of the storage building feeding submarine batteries in the basement of that building. We have extensive supplies, both LTS foods and short term foods."

"LTS?"

"Long term storage. You saw the armory, although you might not have recognized some of the weapons. And, of course you saw the suppressors and Mk 211. You could really put me between a rock and hard spot."

"Sorry, I don't know what you're talking about. What silencers? I'm sure I'd know Raufoss if I saw it, you must have it stored elsewhere."

"When we have time, I'll introduce you to the Tac-50. The bathroom is over there. Flush toilet, shower and a small sink."

Their children, one five and one three, were restless, tired and probably frightened. Kristin had introduced herself to Melody, David Jr. and Cheryl. She already knew David Lawson, just not by his first name and I noticed she was quite reserved with the family. Any discussion in that regard would have to wait. David followed my activities with the remote survey meter and the spiral notebook I recorded radiation readings and events

in. It was divided into sections, one for fallout data, a second event log plus a third section to record miscellaneous information like radio contacts.

When we put in the storage building, a concrete arch was installed between the barn, storage building, shelter and greenhouse. Another idea borrowed from one of the PAW stories. The tanker was still on lease but now ran three ounces per year. All of the tanks were full, included the new above ground 1,100 gallon propane tank. These additions were small when compared to the cost of the storage building and the additions we incorporated.

“Did you ask your parents to explain about Kristin?”

“Dad got angry and sulked off. Mom looked like I’d stabbed her in the heart and started crying. Neither was willing to discuss it. I did some checking on my own and eventually found the records of the dissolution. They were unrevealing. Then I got busy with life and haven’t pursued it.”

“In flagrante delicto is a Latin phrase used to indicate that a person or persons have been caught in the act of committing an offense. There’s more to it, but she’ll have to tell you. It also involves your grandfather.”

“Are you two married?”

“Fraid not. It’s not for want of my asking, believe me.”

“Once burned, twice shy?”

“That isn’t it. Sorry, it’s personal. So, where do you live?”

“Kelley.”

“You obviously made it through the volcanic events.”

“We taped every seam in the house we could find and had two of those Iconic air cleaners. That helped some. So did wearing P-100 masks. Protecting the kids was the hard part. We used surgical masks. We have a small gasoline generator and used it to power a shop vacuum. Melody vacuumed daily. Fortunately we use propane so we had gas for the stove and hot water heater. The house is small and has a fireplace. That was our only source of heat. It looks like you have a lot of food.”

“We do and it’s not all stored in the shelter. It’s been a long process going back over 20 years preparing for the worst that Mother Nature and mankind could throw at us. I’m retired Air Force and Kristin owned a Maid Rite franchise in Ankeny. We both had funds accumulated when we met. I hazard to say that we spent most of those funds and a bit more accomplishing what we have. I want to check on the livestock, care to come along?”

“Sure.”

“We have to go through the armory. Initially I had a 30” concrete culvert as an escape tunnel. When we built the storage building, the culvert was replaced with a 6’ high pedestrian arch. The stuff is called three sided concrete culvert and can either be rectangular in shape or arched. These were precast in a special pour and are 6’6” high at the peak and 3’ between the walls. Watch your head.”

We moved up the upgraded tunnel to the storage building.

“Ok, where are we now?”

“This is the basement to the storage building. We made it 12’ deep rather than 8’. Those batteries are fairly big and take a lot of floor space. We put that storage shelving over the top.”

“Batteries with wheels?”

“Transfer dollies. We have two spare batteries. We’ll probably never need them, but we have them.”

“How do you charge them?”

“Photovoltaic panels on the roof. They can put out about 23kw. You can see some of our extra ammo over there. There are two generators in the garage. The basement holds the really heavy things, the main floor medium weight items and the second floor the lighter items. This tunnel goes to a small room beneath the barn.”

“Whew, quite the smell.”

“It will get worse as we accumulate manure. Everything here is about what I expected. Climb back down the ladder and we’ll go back to the shelter.”

“Is this the last of it?”

“The greenhouse is also connected via tunnel. I’ll have to check the radiation level before we can go there.”

“You don’t think Des Moines will get hit do you?”

“I don’t know what will get hit. So far it’s just been HEMP devices. If you had a newer car, I doubt it would run. Have you been following the news? China only had about two dozen of the intercontinental ballistic missiles, the DF-5A. According to Fox, when US satellites showed them being fueled, they were taken out. They still have some silo based DF-5As; anywhere from four to fourteen. The HEMP devices were apparently

fired by their two submarines. That would leave them with 33 SLBMs off our coast spread among 3 SSBNs. The only military targets in the Midwest would be Whiteman and Omaha. They could feasibly target the Lake City ammo plant in Independence.”

“Why there?”

“Have you been following the news? The President is bringing the troops home and after leave, they’re being deployed along the Mexican border. The National Guard units and a portion of the active military are also being deployed to the west coast. Kristin and I have discussed this at length. China was in a drought before the volcanic events. The volcanic winter that followed must have tens or hundreds of millions of the Chinese people starving. Famine is one of the natural causes of war.”

“You must follow things like this closely.”

“To an extent. Plus I belong to several boards that are preparedness oriented. People run across interesting tidbits from various sources and post the information and or a link so others can check it for themselves. One section is usually devoted to fiction. Those authors try to envision some sort of calamity and the possible or probable outcomes. The stories are also good sources of information because many of the authors do extensive research when they put a story together. TOM and Jerry are two of our favorite authors.”

“The cat and the mouse?”

“No. TOM is an acronym for Tired Old Man. His name is Gary D. Ott and he lives in Palmdale, California. Back between ’62 and ’65 we were actually stationed together at Edwards Air Force Base. Jerry D. Young lives somewhere in Nevada. I suspect he might have been raised in Missouri because most of his stories take place in the Ozarks. There’s no radiation, we can go to the greenhouse. Kristin, do you need anything from the greenhouse?”

“Salad makings, please.”

“What are you preparing for supper?”

“Tuna and Noodle casserole.”

“You want salad with that?”

“I guess it doesn’t really go together does it? Just check and see if we have lettuce getting ready and let me know. I’ll plan around it.”

“I’m really sorry if we’re upsetting Kristin. You were the only place that came to mind when we got that EMP.”

"I'm not sure that's exactly the problem. She developed a medical problem, she never said when, and can't have children. The fact that you're the son of her first husband could be reminding her of that. As I said, keep a low profile and give me a chance to discuss it with her."

"How long have the two of you been together?"

"Almost twenty years. Twenty very good years. In relative terms, she's much better off financially than I am. I get my Social Security and Air Force retirement. She has investments that have done very well over the years. She mentioned once what she had but we don't discuss it. Her broker is in Des Moines and she said he was very good. For all I know, he might have taken her out of the stock market and moved her to precious metals. An ounce of gold is a lot of value in a very small package. I have some too, how about you?"

"No gold. Another Deputy sold me several rolls of junk silver so he could get something he wanted. You have rifles similar to the one he bought, the civilian version of the M14."

"We have four, two standard models and two Super Match models. Although they're rated for eight hundred meters, we can do well out to about one thousand. My Tac-50 is just getting warmed up at those ranges. The longest recorded sniper kill for a while was a Canadian using a Tac-50 and Hornady A-MAX ammo. The distance was 2,430 meters. Earlier the same day, another Canadian sniper made a kill at 2,310 meters. That was broken in 2009 by a British soldier using an Accuracy International AWM, British designation L115A3, in .338 Lapua Magnum. The distance there was 2,475 meters. He reported it took about nine shots for him and his spotter to initially range the target successfully. Then, he reported, his first shot 'on target' was a killing shot."

"I can't imagine shooting that far."

"Kristin can approach two kilometers. I've gotten a little rusty."

"You mentioned Single Action Shooting. Did anything ever come of that?"

"Sort of. I bought leather from Kirkpatrick in Laredo. We have rifle and shotgun scabbards on some of the tack. You working with the Sheriff to get us CCWs was a boon. We carried .45acp pistols for backup, concealed of course. Single Actions are great firearms, but nothing beats a pistol for fast reloads. I think that's why police departments gave up on revolvers and speed loaders and replaced them with pistols."

"But, back to the sniping for a moment. The previous distance record was held for over forty years by Carlos Hathcock. When it comes to the fastest pistol shot, that record was held by Ed McGivern even longer. History channel or maybe it was Military channel showed a film of his shooting. Fame is fleeting. A lot more Americans will remember Hathcock's name than will remember the Canadians or the Brit. They were using fancy,

expensive sniping rifles. Hathcock used a Ma Deuce with his scope mounted on it. I bought my Tac-50 before the Canadians set their records. I even use the same ammo.”

One Tin Soldier – Chapter 11

“You follow the buy cheap and stack it deep philosophy?”

“For the most part. The problem is that ammo is no longer cheap. We’ve had a buying program of sorts and use Match ammo for the sniping rifles and NATO surplus for the standard rifles. And, before you ask, I don’t care for the AR-15 and its ilk. A Mini-14 may not be quite as accurate, but it’s ten times more dependable.”

“What ammo do you use for the pistols?”

“Speer. Gold Dot for carry and Lawman for practice. Hornady A-MAX for the TAC-50, Black Hills 175gr BTHP for the Super Matches. At the moment all we have is Radway for the standards. The .45acp flares came from firequest dot com and the .45acp shot shells came from midwesthuntersoutlet dot com. The twelve gauge flares are standard 12 gauge marine flares. And, our 5.56 is a Lake City M193 on stripper clips. I got that from Ammoman.”

“Do you have flechettes?”

“Two sources, Ammunition to Go and antipersonnel dot net slash sdllc but I didn’t buy any. They’re awfully expensive and with the terrain around here, I question how useful they’d be.”

“Slugs, buckshot and regular shot shells?”

“Brenneke slugs and 8 pellet Remington Low Recoil 00. The shotguns are cylinder or improved cylinder and I’m not much of a wing shooter. Our .22LR ammo is 40gr solid, 36gr hollow point and an even mix of Yellow Jacket and Viper. We have three cases total. Miscellaneous ammo for guns like my ‘03. No LAWs rockets or fragmentation grenades but we got some smoke grenades from Ammunition to Go.”

“I think you mentioned nearly everything except those cans of Mk 211 that I didn’t see.”

“Well...I didn’t acquire 36 cans and I don’t have 35 and a fraction left.”

“I noticed the extended barrels on the .45 pistols.”

“What you see is a thread protector. I have cans for those, a pair for the Mini-14s, a pair for the Super Matches, a Mark II with an integral suppressor and one for my Hi-Power. I wasn’t satisfied with the subsonic ammo and stuck with the 36gr hollow points.”

“How did you get a can on a Mini-14?”

“Two came with threaded barrels, the AC-556 and the Mini-14GB. I got a gunsmith down in Florida to swap out the barrel on the one with the standard barrel to an AC-556

barrel and added a folding stock. A few years back, Ruger modified the piston assembly to reduce barrel vibration, but I decided against having the carbines retro fitted. I couldn't very well drag an AC-556 into an Iowa dealer, could I?"

"Does it keep you up at night worrying?"

"At my age, it doesn't make much difference. I might not live through the trial."

"What are you going to do with them when you die?"

"Kristin has family that might want them. I'll be dead so I doubt I'll care what happens to them. Maybe find a LEO that can legally own them and sell them off if I have the time. I haven't had any contact with my family since 1961. One of the reasons we didn't marry was the agreement that what's hers is hers and what's mine is mine. I did have a simple will drawn up that leaves her everything if we're still together when I die. We try to avoid sticking our nose in the other's business except those things that affect us jointly. What's your story?"

"Two years of Junior College down at Des Moines and then I became a Deputy. It's 99% boredom and 1% action. We've been married a little over six years. Not sure whether we'll have a third child or not."

"I'm surprised we haven't gotten any radiation. I'm going to hook up a cheap radio to my Discone antenna and see what's what."

None of the stations in the area were broadcasting. I turned the TV on and it was dead.

"There's still no fallout David. Want to go topside and take a look around?"

"As long as it's safe, sure."

"We'll take the low range Geiger counter just to be sure. Maybe air out the barn for a bit if it's all clear. Let me zero out a pair of dosimeters. You'd better wear your duty belt."

"I always carry, even off duty. Compact Glock in an ankle holster."

"What caliber?"

"Forty Smith and Wesson. The US Law Enforcement pistols, G22 and a G27."

"Don't own one but they seem to be popular."

"I'd prefer the .45acp but the Department chose these. We can carry the .45acp, but they won't supply the ammo if we do."

"What ammo do you use?"

“Winchester Ranger Partition Gold. I have quite a lot accumulated.”

“What do you have for long arms?”

“Department issue shotgun and issue semi-auto only M16. My person arms include a Remington Express combo and a Ruger SR-556. Plus I have one other handgun, a Colt Python with the 4” barrel. I have assorted ammo including the same M193 you mentioned on stripper clips. We don’t get rich being Deputies and I had to decide whether I wanted an M1A Loaded or the Ruger. I went with the more expensive and am trying to save up for the M1A. I can get the M1A for wholesale and maybe I should have gone with it. But, the ammo is so expensive.”

“That depends on where you buy it. Clip this on. Are you ready to take a look?”

“Is the Geiger counter on?”

“Yep. Let me get the blast door. You may want to lean on it to help push it open.”

“What’s it filled with, concrete?”

“Actually, yes. Ok, no radiation so far. When I turn the corner, we’ll have a better idea. Nope, nothing. Follow me up the stairs and watch your step.

“Nothing here at the door. There, that got it, we’re now fully exposed.”

“And?”

“Nothing.”

“I supposed maybe we overreacted.”

“That remains to be seen. Somehow I doubt China won’t react to us taking out those missiles they were fueling or the attack on Beijing in retaliation for the HEMP devices.

Look, up in the sky.”

“For what, Superman?”

“No. Contrails. Not a single one. That’s very unusual; there always seem to be a few. You know about the contrails/chemtrails conspiracy?”

“Nope, now what?”

“We’ll loosen the canvas cover to the barn doors and open the top halves to air the place out.”

“Dutch doors?”

“Very handy for this sort of thing. They were invented to keep farm animals out of houses and permit air circulation. The reverse should hold true; keeping the animals in the barn while allowing circulation.”

“Those animals aren’t well protected. What good does a canvas cover do?”

“It keeps out the particles but that’s about the limit. Now that we have time, care to help me move some bales of straw and hay against the barn? You’ll notice that I changed the original haystack and put bales of hay against the barn two layers deep plus one layer of straw. All we need to do is move hay and straw to cover the doors. Got the idea out of a PAW story. In that case, the man had earth sheltered barns. I have rolls of plastic to cover the hay and straw.”

“PAW?”

“Post-apocalyptic world. You know, the world after it’s gone to Hell in a hand basket. Sort of like after the volcanic eruptions.”

“Just how long could you last in a PAW?”

“We probably have enough food for ten years. We could fight a couple of wars if we had to. Kristin’s family is about in the same situation. They have a large farm out near Adel with a fair amount of remaining livestock. They had to sell off quite a bit but they’re rebuilding the herds. Huge garden. Enough to feed three families: her parents and both her brothers. Proportionally about the same as our garden. We have a large garden and it’s only the two of us. We sometimes end up giving away potatoes and onions.”

How do you explain what’s involved with survival in a PAW? Especially when he doesn’t know what PAW means until you define it? Most rural people have a clue, at least. David seemed to instinctively know, in general terms, what it took. I had a passing thought that perhaps there was a temporary vacancy in China’s leadership which might account for the delay in their response. I considered and dismissed the possibility that they wouldn’t respond. At that particular time, I failed to consider the troops the President had ordered to the border and west coast.

The President of México was so angry with the US over the Arizona law, the drug cartel infighting and so forth, he accepted an offer from China to assist in controlling the drug war. The Chinese supplied three companies of soldiers and then three more and then three more and all of a sudden there were more Chinese soldiers in México than there were Mexican soldiers. Satellites are wonderful devices; you can keep an eye on everyone, including your neighbors.

When the Director of National Intelligence presented the President with irrefutable evidence of a Chinese buildup in México, the President began moving troops. It didn't hit MSM but the amateur net was abuzz. Other satellites caught Chinese troops being loaded on cargo vessels and the President moved the National Guard and some of the troops to the west coast and put front line troops on the border with México. About the only real surprise was the attack with HEMP devices. A proportional response was made against, not the submarines, but Beijing. When China began to respond by dragging the missiles out of their tunnels, erecting and fueling them, the missiles were destroyed in place. The White House viewed their actions as proportional but the Chinese didn't agree.

With the schedule of the planned events firmly in place, the Chinese had little choice except follow the schedule and continue to assemble their forces for transport east. Additional troops were flown to México but their equipment was on ships in the mid Pacific. An army travels on its logistics and requires both the equipment and replacement stores to conduct a military campaign. Ask Napoleon, he said an army travels on its stomach.

The Chinese People's Liberation Army has introduced a ration consisting of pre-packaged 1-man meals sealed in hard plastic retort pouches. The Chinese soldier rations is divided into Instant Meal Individuals (Twelve item menu), and Self Heating Individuals (Three-item menu.) A typical Chinese ration package contains roughly 1000 kcal, and includes compressed food, energy bar, egg rolls with pork, pickled mustard tuber, and instant solid beverage. Every Self Heating Package comes with an insulated flameless heater activated by water.

In the event that we had to be away from home on a 'mission' we had civilian MREs packaged by SOPAKCO as Sure-Pak Meals. They came 12 to the case and cost sixty-four bucks plus shipping. While they might not be a roast turkey dinner, à la Thanksgiving, they'd fill the hole. We had 12 cases on hand but only because it seemed like the right thing to do at the time. We initially bought 13 cases and tried one case to decide which each of us liked. They didn't include toilet paper so we bought Bio Wipe Rolls, \$105 for a 200 pack of 140 sheets packaged in a plastic wrapper. I added matches, cigarettes and the missing condiments.

Certain things, gold and silver for example, held their value. If a dollar bill was printed in a size corresponding to its value, they'd be smaller than postage stamps. What didn't get spent on precious metals and supplies for future needs, including ammo, was spent on various 'nice to have' things. We discussed and discarded the notion of acquiring gemstones as part of our preparations. While they probably were a good investment, they were really much more of a long term proposition while gold and silver were immediate.

The barn was aired out enough by the time we had the hay and straw up to the top of the bottom door, so we closed the top, slid the canvas back in place and covered the top of the door with hay and straw bales. When we had that completed, I got a roll of plastic from the storage building and David tucked it in at the top of the bales while I

nailed it to the ground to allow any rain to run off. It took a while and 2 rolls of plastic before we finished. It was also dark out by the time we finished.

“I kept your food hot. Where have you been and what have you been doing?”

“We filled in the hay and straw in front of those two doors and covered all of the hay and straw with plastic. That smells good.”

“It’s probably dried out from keeping it warm.”

“I’m sorry; I should have waited to do that until tomorrow.”

“There’s no radiation. Was it a false alarm?”

“I thought China would have retaliated by now.”

“We don’t grow that much rice in the US, do we?”

“We actually import rice from Thailand and several other countries. California and Arkansas are two of our principal rice growing states. That Elephant brand rice we get from Costco is grown in Thailand.”

“Speaking of rice, how many bags do we have?”

“Forty-four unopened. That’s twenty-two hundred pounds. We have eighty unopened bags of pinto beans. The other dry beans, maybe one thousand pounds. That includes the Great Northern, Navy beans, Kidney beans and Piquito beans. And, we’re long on coffee. There are 92 of those six can flats. The cans are 57 ounces and the label says each makes 380 cups of coffee. The other super critical item is bath tissue and it looks like about half a truckload.”

Melody raised a trembling hand. “Do you have any feminine hygiene supplies?”

“We have some as part of our trade goods, Melody. I haven’t needed them in years,” Kristin replied, smiling. “But I always figured they’d be worth their weight in gold if they were needed. Oh, not actually, that was a figure of speech.”

Is the ice starting to melt? A smile? Every generation has a legend. Every journey has a first step. Every saga has a beginning. – Star Wars

Kristin took Melody aside to explain that we had both pads and tampons. While we didn’t have as many packages of those, as compared to bath tissue, the supply of both was substantial. Realizing that manufactured goods would be difficult to obtain in a PAW, as evidenced by our experience during the volcanic period, we had increased our supply of manufactured goods, especially those that were disposable or would wear out, like clothing.

About the only thing we didn't have was children's clothing. There were cloth diapers in our trade goods, but no children's clothing. What we had instead were multiple bolts of cloth, boxes of thread and notions and both an electric and a treadle sewing machine. The electric was White and the treadle was a rebuilt Singer straight stitch. But then, we had multiple sources of electrical power. There was another brand that was of Japanese manufacture that showed up on the internet when we searched, but it proved to be discontinued.

One thing we intentionally excluded from our considerations was payback period, e.g. how long will it take us to break even on something like 26 batteries, 84 PV panels, the charge controllers and inverters. We concluded that the answer was probably, 'not in our lifetimes'. The equipment had a projected lifetime greater than ours. We simply wanted what we wanted, power until we no longer needed it, as in when we died. All I had, besides my material possessions, was Kristin. She had both material possessions and a family and was younger than I.

The discussion never came up until now, but I smoke about a pack and a half a day and have since I was in Basic Training. At Edwards, cigarettes ran \$1.90 per carton. Now days they're more than double that per pack most places. For a long time, I drove down to Missouri and bought really inexpensive brand name smokes. Still do; Iowa charges \$2.37 tax per pack and Missouri charges \$1.18 tax per pack, a savings of \$11.90 per carton. Second cheapest legal smokes in the US; South Carolina is cheapest. Generally bought 20 cartons, give or take, at a time and the \$238 I saved more than paid for the gas. How many cartons of smokes do I have put up? I won't be having a nicotine fit anytime soon. And, if the cigarettes were going to kill me, I'd be dead by now. (That was dated information. At the moment, Missouri has the lowest taxes 17¢ in the US. Even with local option taxes, they're still the lowest.)

However, I can't smoke in the house even though it's my house. The first time we sheltered, I just used one of the bunk rooms to smoke. We reached that agreement before Kristin moved in. When I think back to that time, I'm sure it was a deal breaker. The bunk rooms are full up now, but I can go down one of the tunnels and stink up the storage building or greenhouse.

We stayed in the shelter for three days. When it became obvious that we were under no threat of immediate attack, we came out. The decision was reached after Kristin and Melody had started the evening meal and they agreed to stay and help us eat the small turkey. During those three days, I had to show David where I snuck off to have a smoke. He only had a couple of packs so I broke out a carton for him. I smoke Kool's, but my trade goods had a few cartons of Marlboro's. They were close enough to his Camel's to tide him over. We had several discussions, mostly pertaining to preparedness and he slowly came to appreciate our viewpoint. The fact that they'd suffered badly during the volcanic period and were almost totally unprepared when war threatened appeared to change his thinking.

"I don't know how fast we can do it, Jason. We're going to need clothing for the children. I'd really like to get that M1A or something in 7.62x51mm. I can't surf the web to find a cheaper alternative so I'll probably go with whatever model of M1A I can find. I have a lock on some magazines and know where I can get the ammo. There are other things we need to gather up that I've never given enough thought to, like Melody's feminine hygiene supplies and my smokes, for example. I'm afraid those smokes are going to be on the bottom of the list, though. You guys have literally tons of food. No wonder you had to build a storage building."

"We didn't buy it all in one fell swoop, David. We're talking about several years' worth of accumulation. When I originally replaced the roof on the bungalow, I considered PV shingles but the guy talked me out of it. I wasn't until recently that we went to those PV panels and, let me tell you, it was a major expense. Had to sell off a little gold to finish paying for it."

"Just how much gold and silver do you have, if I may ask?"

"I slowed down buying junk silver coins when I got to 300 pounds."

"What's that worth?"

"That's 4,375 troy ounce of coins which are 90% silver. Some the coins were new and uncirculated. Assuming they were all uncirculated, that would be about 3,937.5 troy ounces, all purchased at face value of the coins. At today's market, \$32.25 times 3,937.5 equals right around one hundred twenty seven grand."

"I suppose you bought gold cheap too?"

"Not all of it, but it averaged out. I got into that when Krugerrands came out. Switched to Eagles when they became available. Had to pay a little premium, but considering what I paid for the Krugerrands, I did all right. I have an equal quantity in troy ounces of each of the four Eagle coins. Kristin and I keep ours separate and I don't know what she has other than it's more than I have."

"If you don't mind me saying so Jason, you're awful free with the information. Aren't you afraid it will turn around and bite you on the butt? From what little I know about survivalists and, what did you call them, preppers, they hold the information pretty close."

"We do. And you being a Deputy Sheriff has nothing to do with my being open with you. It is unlikely that anyone can get inside our compound. If they do, we will be aware of their presence. Period, no discussion. I learned a long time ago that it's better to shoot first and answer questions later. Iowa, after all, has an unusual law with respect to those circumstances. You know it as well as I do. It's justifiable homicide so long as you are in fear of your life. There's none of this equal force crap. That went out what, late seventies? I don't have to get a ruler and measure the length of the knife blade because I

don't have to see a knife, gun or anything else. All I need is to be in fear for my life. Maybe the guy knows Kung Fu or something. Can you tell by looking?"

"It still has to be reasonable."

"I know. Can you tell a knife from a screwdriver in the dark? I can't. It's been tested in court. Some eager beaver might arrest a person, but the county attorney is going to set them free 99% of the time. I didn't even live in Iowa when they passed that law, but I do like it. A man's home is his castle and he shouldn't be forced to retreat. If someone breaks into that castle, the man has a right to put them down."

"You're not armed all the time, are you?"

"Don't wear it in the shower or to bed, but in both cases it's very handy. One of the perks of not having children or many visitors is how little we're limited. Next time I go to Bethany, you want me to pick up some smokes for you?"

"Call me before you go and I'll let you know. We only have so much money to spread around. I was wondering, if this situation arises again before we have time to get a little better prepared, will your door still be open?"

"Ask Kristin. For my part yes. It's always a comfort to have a LEO around when there's trouble. It is totally her decision and my opinion only counts if she says yes so don't tell her I said yes until she agrees."

"How do you remember things like that?"

"I'm old and don't have a lot of things to do. I read it until it sticks."

"So, what does it tell you?"

"The law? Don't shoot 'em in the back."

"That's all?"

"Just about. Well, no coup de grâce. You do realize that it's ku:de gra:s and not how we usually pronounce it."

"Won't leave them any less dead."

"I guess you're right. You'd better have a word with Kristin and whatever she says goes."

"Uh, right."

From the grin I deduced that she said yes. I had a feeling she'd say yes because she'd gotten very fond of the children. The fact that David was Jack and Cheryl's son wasn't his fault. Additionally, Melody seemed to need mothering. They loaded up their things and left shortly after dark.

"I conclude you told David yes."

"Did he ask you?"

"I told him it was entirely up to you. I'm ok with it but I wasn't hurt like you were and it would be categorically wrong to impose my views on you in this matter."

"In this matter?"

"Well, most matters. I'm as entitled to an opinion as you are Kristin."

"That you are. Sorry."

Don't believe that crap that *love is never having to say you're sorry!* That's just a line out of a movie, *Love Story*. Neither Ali McGraw nor Ryan O'Neal look like that anymore either; she was born in 1938 and he was born in 1941. Senior citizens now.

"Why don't we wait until tomorrow morning to sort out what needs to come up from the shelter and what stays?"

"That sounds good to me. Remind me if I forget to stock up a little heavier on feminine hygiene products. It might be a good idea to have a small assortment of children's clothing, just in case."

"Thinking about David Jr. and Cheryl, are you?"

"The little girl, Cheryl, yes. I guess I can't fault David for who his parents are. It upset me when I found out and again when they showed up unannounced. It wouldn't be right to punish the children and grandchildren for the sins of the parents. Melody is kind of a lost soul. Big town girl from Cedar Rapids. Where they live is the boonies by comparison. Kelley is what two or three blocks long and two blocks wide?"

"It's not very big. One of those blink and you miss it small towns."

One Tin Soldier – Chapter 12

I was tempted to go to Frugal's when the net came back up and send an email to TOM. Mostly just to see if he remembered me. It was just a passing thought that got lost among the chores the next day as we sorted through the shelter, moved things back to the house, restocked the shelter from the storage building and tended to the livestock. The chickens went back to their normal quarters and the pasture barn door was opened to let them out for a while.

Mid-afternoon, Kristin sat down with a legal pad and made a list of things she wanted to add to the stores. She listed shoes, socks, jeans, shirts, blouses, underwear, coats, mittens and toys. Instead of tampons, it was Kotex regular panty liners and heavy flow pads. Apparently what she had in her trade goods would remain in her trade goods. I made a mental note to pick up a few cartons of Camel filters. I also decided to see if any surplus NATO 7.62 was available in Des Moines.

We weren't going for a few days, there was nothing pressing and we still had a level of uncertainty relating to the HEMP and our unanswered retaliatory strikes against China. Surely the US could have gotten a pair of P-3 Orion's airborne and located the Chinese subs. Why then did TPTB elect to nuke Beijing? One of the highly touted pieces of equipment on ASW aircraft is the MAD. Unfortunately they work best when the target is shallow and properly aligned with the sensor.

Cheyenne Mountain could produce the approximate coordinates of the launch sites. There was a time lapse between detection and detonation. There was a further time lapse between aircraft launch and transit to the launch sites. If the subs dived to near their maximum operating depth and moved off at maximum permissible speed, the search sector would be fairly large and expanding continuously. That's just one of many explanations of why they did what they did. Unlike the subs, Beijing was a static target. And if an invasion was actually expected, chopping off the snake's head wasn't without merit.

We didn't know the status in Eastern Europe either. The latest news had put Russian forces at the borders of the Baltic States. Given my limited familiarity with military communications systems, the hardened systems were mostly operable. Low earth orbit satellites had probably been damaged to an extent. That would limit the effectiveness of several weapons systems including GPS guided bombs and artillery shells like Excalibur. During testing Excalibur was intentionally fired 15° off target and landed well within the 10 meter CEP, missing the exact spot by two meters. However, going over my notes I discovered that the GPS satellites were in an 11,000 mile high orbit.

We went to the stores that I knew carried surplus ammo and they had the Radway. \$45 a bandoleer compared to AIM's 35.95. I got 6 750-round cases and another case of 12 gauge slugs. He had a Harris bipod the same as the one on my Super Match and I added that to install on Kristin's Super Match. Got the stud too.

The next morning after chores, we decided to run the risk of a trip to Des Moines to shop. Penny's was open at the downtown store but they were using old fashioned sales books. Hadn't seen those since the 1950s. I pushed the cart and Kristin methodically went down her list. By the time she finished the cart was full and the sales clerk whose job was to write up the sales ticket was scowling. It took almost as long to write up the sale as it did to select the items.

When it came time to pay, Kristin pulled out a roll of hundreds, peeling off enough that she had change coming. Apparently the clerk thought she intended to pay with a debit, credit or a check. The cash brightened her mood considerably. The next stop was the shoe department and to keep it simple, she bought a set in white in each size and a second set of each size in black. The final stop was the clothes in teen sizes and virtually identical exercise as it had been in the children's section. This time I took the items up in groups so the sales ticket would be almost ready by the time Kristin presented her last choices.

While the boy's and girl's clothing were adjacent sections, I took it all to the one sales person. This time I was the heavy getting the occasional dirty look. We pulled/pushed four carts out to the pickup. Placed in a single pile, it was a lot of clothing but Kristin told me she'd only bought three or four pieces in each size. It took two drug stores to get the things for Melody and I took advantage of that to get just a few more first aid supplies and OTC medicines.

I was getting hungry and started looking for an open café or restaurant.

"I'm hungry. All of the food establishments seem to be closed. Do you know where we might find one that's open?"

"We might try Chuck's. If he's not open, let's just go home."

Chuck's was closed. The SUV that pulled in before us was packed to the gills with packages of food. I hopped out and flagged the guy down."

"Excuse me, where did you find an open grocery store?"

"Costco in West Des Moines."

"Is it picked over or do they still have food?"

"They had plenty when we left about an hour ago."

"Costco in West Des Moines is open as of an hour ago. Want to check it out or go home?"

"It's about the same amount of time it would take go home. Since we're here, let's see what they have left."

“How big is that roll of cash?”

“About $\frac{3}{4}$ ”.

“Enough to go to Costco?”

“Costco, Sam’s Club and every Hy-Vee in town.”

“Work up a shopping list on the way.”

The store had been picked over and they were limiting although I must say that the limits were generous. Four flats of coffee, four cans of Crisco, two bags of flour of any size, two bags of sugar of any size, four cans of Hersey’s cocoa, twenty pounds of butter, twenty pounds of bacon, six hams, four package limit on any fresh meat product including pork loins, sirloin steak, 12% ground beef and chickens, one jar of each spice, four bundles of bath tissue, one flat of mushrooms (24 cans), 12 cans of Spam, four four-packs of chicken and beef, one flat of tuna, two 15 count bundles of macaroni and cheese, five bags each of any prepared mix like pancakes, muffins and cookies, four one gallon jugs of vegetable oil, five two bottle packs of Aunt Jemima syrup, four bundles of paper towels. We started out with a cart apiece. We had to add second carts just before we got to the homestretch. We ran the aisles of the pharmacy, selecting a few things and moved to the nearest checkout lanes. We checked out separately.

“Time to stock up again?”

“It is. Why the limits?”

“Transportation issues, among other things. As you probably noticed, all of the merchandise stored on the high shelves had been moved to the bottom shelves. We were supposed to get a truck but it seems to be running late. Might have to shut down for a day or two to let the supplies build up to meet the demand. We’re usually busy but since the nuke thing we’ve been swamped.”

“How is it that you have cash registers?”

“We were shut down to rearrange the checkout lanes and the cash registers were stored in the cigarette cage. We have a generator and conditioner for the electronics. We can’t take checks, credit or debit cards. Like the sign says, ‘cash only’. Some genius said it would be better to disconnect the registers and leave the wiring in place. He must have been right; we’re the only store I know of in Des Moines with operating cash registers.”

“I know that Penny’s downtown is using sales books. I don’t suppose you know if Sam’s is open?”

“I heard they were but they’re using sales books too. Their generator will only handle the lights, refrigeration and equipment in their meat department. Cash only, the same as us.”

I finished before her and parked my carts.

“Did you hear that?”

“Yes.”

“What do you think?”

“I could really use elbow macaroni, egg noodles and penne pasta. I’ll run back and get a flat of tomato sauce and tomato paste, I’ll be right back.”

“Can you ring up a flat of tomato paste and tomato sauce without having the cans?”

“No problem.”

“She’ll be right back, she has the cash.”

“I’ll start boxing her order.”

“She’s back.”

“There’s the total, cash only.”

“Not as bad as I thought. We’ll get this in the trailer and head for Sam’s and then home for hot turkey sandwiches with smashed potatoes, turkey gravy and corn on the cob.”

Sam’s wasn’t as busy as I feared. We only needed a few items. She added several large containers of Nestles hot chocolate. It was around three thirty when we pulled in. We took everything to the storage building to sort through later except for the fresh meat. While she repacked the ground beef, I cut the loins into pork roasts and added them to the basement freezer along with the four chickens and four packages of sirloins. When she took the ground beef to the basement freezer, she came back with the packages of sirloin and repacked them two pieces per bag.

“I think we’re about full and I mean really full. The freezers are both full and the water jugs had to come out. There’s almost no room in the storage building. Perhaps we should let David and Melody know that we bought some clothing for the children so they can concentrate on other preps.”

“We’ll do that tomorrow after I’ve sorted through the clothing and put it up. I believe it would be best to vacuum pack it to prevent dry rot, keep critters out and allow us to store it in the minimum space possible.”

“What did we do before they invent seal-a-meal?”

“We got by with something else. Let’s eat.”

“I thought you said corn on the cob.”

“I did. It was buried so I open a can of Mexicorn instead. I’ll dig some out when I have the chance. I’ve been wondering; how did we manage to accumulate over a ton of rice and a ton and a half of dry beans?”

“Most of it happened because we double and triple bought when we went to Costco and Sam’s. The rice should keep almost forever. The beans may require pressure cooking if they’re really old but everything is useable.”

“Do you have any idea what’s going on around the country? World War Three turned out not to be World War Three, troops are being moved to who knows where. You’d think the government would at least try to get the NWS radio system operable and get some information out to the public.”

“Maybe they’re working on it. It may be a matter of priorities or the ability to get those local stations back on the air. The SAME system relies on stations all over the country. It could be a nightmare getting them back up. Damaged equipment would need to be repaired and a source of power supplied.”

“Get on the amateur radio after supper and see what you can learn.”

I did get on the radio after supper. It was immediately obvious we should have been on the radio the moment we decided there were no warheads headed our way. I didn’t even try to talk; I listened and jotted down notes about what I was hearing. I was up until after eleven with most of the discussion coming from the west coast area later in the evening. I covered my notes with Kristin the next morning.

“The President has been moving troops. The National Guard on the border was replaced by front line troops fresh from Iraq and Afghanistan. The National Guard forces were redeployed to the west coast along with the troops from Korea, Germany and some other active duty forces. As best as I could tell, the forces are going in at or near possible landing sites for an invasion force.

“Another guy who works for a radio station said that the government is working 24/7 to get the NOAA NWS SAME system reactivated. There was some speculation about the Militia.”

“What Militia?”

“Oh, that’s US law. The law says at TITLE 10 Subtitle A PART I CHAPTER 13 § 311:

“§ 311. Militia: composition and classes:

“(a) The militia of the United States consists of all able-bodied males at least 17 years of age and, except as provided in section 313 of title 32, under 45 years of age who are, or who have made a declaration of intention to become, citizens of the United States and of female citizens of the United States who are members of the National Guard.

“(b) The official classes of the militia are:

“(1) the organized militia, which consists of the National Guard and the Naval Militia; and

“(2) the unorganized militia, which consists of the members of the militia who are not members of the National Guard or the Naval Militia.

“The organized militia created by the Militia Act of 1903, which split from the 1792 Uniform Militia forces, and consist of State militia forces, notably the National Guard and the Naval Militia. The National Guard however, is not to be confused with the National Guard of the United States, which is a federally recognized reserve military force, although the two are linked.

“The reserve militia or unorganized militia, also created by the Militia Act of 1903 which presently consist of every able-bodied man of at least 17 and under 45 years of age who are not members of the National Guard or Naval Militia.” (That is, anyone who would be eligible for a draft.).

“We’re too old.”

“It’s still our country. Remember the discussion we had back, oh I don’t know when, about famines and countries invading to get territory to produce food?”

“We were talking about Toba.”

“That’s right, the Toba catastrophe theory. The world is in a similar position because of the volcanic activity. I’m surprised it has taken this long to happen. Hungry people aren’t particularly patient. I doubt it will be like Jerry outlined it in *China Gamble*.”

“I must have not read that one.”

“It started off with a yacht trip.”

“I remember. A bunch of Marines on a yacht checking out the Chinese. The owner died and the guy found guns, money and precious metals? Converted everything to some uniform means of exchange and ended up going off to California to fight the war?”

“That’s the one. In some ways our present situation reminds me of that. Those authors’ covered just about every possible scenario; it seems inevitable that some of what they suggested would happen, eventually.”

“I guess more than one of the stories combined volcanic eruptions and WW III. Sometimes it was geological targeting. There’s no reason to believe that the order of events couldn’t be reversed with the volcano preceding the war.”

“Kristin, I believe we’d better spend more time at the range. I admitted to David that I was a little rusty.”

“A little? Ok, I’ll be nice. More than a little, but it shouldn’t take too long to get back up to speed. We can test fire the .50BMG reloads and compare them to the Hornady A-MAX rounds we have. If there’s a significant difference, we’ll just note it our range books. It would be best if you started out with a known quantity, the Hornady ammo and when you’re shooting is back up to par, switch to the reloads. I’ll do the same.”

“We’ll go see Melody and then go to the range. Maybe your decision will give her some relief. We have to be careful, however; it can’t smack of charity. Charity usually has a negative effect. Either it lowers the person’s self-esteem or it creates a condition where they come to expect it. We don’t want to do either of those. I’m not going to mention the ammo I picked up. I want to wait and see what he finds for a rifle. He seemed adamant about acquiring a 7.62×51mm rifle. Some of them out there are less expensive than the standard M1A. He might find a STG-58 or other FAL, an HK-91 or PTR-91. I suppose he might even find an AR-10 or one of the newer rifles made for the military for use by Designated Marksmen.”

“You have that Browning Hi-Power if Melody needs a pistol, but somehow I can’t feature her as being comfortable with a firearm. She’s just too timid, I guess.”

“That could change if it got down to protecting her children. If he doesn’t get the rifle he wants, we could let one or both use our standard models. Although, realistically, I think the Mini-14 would suit her better. She’s a little light for a full power rifle.”

“The enemy may or may not be at the door of our country. They sure aren’t at our door at the present. Let’s get this show on the road Jason before they are.”

Kristin didn’t exactly tell Melody that she gone to Penny’s and bought new clothing for the kids. She suggested that with all of her nieces and nephews, clothing was available in our storage building and if they didn’t bring more than a few changes of clothing it wouldn’t be a big deal. Melody sure was shy. She said that Dave had the rifle but it wasn’t the model he wanted, just the same brand. She then surprised both of us by saying that Dave had taken her shooting. The grips on the Python were too large for her hands. The Glock was marginal and she might have been able to handle a lighter cartridge but the .40 S&W was a tiny bit more than she was comfortable with.

We discussed what she had said on our way to the range and concluded that either the Hi-Power or the Mark II would be the pistol of choice for Melody. I voiced the thought that I hoped she could handle the Hi-Power because of the ammo I had for it.

Over the course of the next month, my shooting improved back to the previous level. That is to say, 1,000 meters 95% of the time with the Super Match and 1,500 meters 98% of the time with the Tac-50. We were using silhouettes. Kristin was in top form in two weeks and had the reloads doped out.

What happened next was right out of Hollywood. Remember the Wolverines from circa 1984?

A film depicting the invasion of the United States from the north and south by communist forces from Cuba and Russia in the beginning of WWII and the efforts of partisans from a small mid-western town to turn back the invasion. This film is one of the basis of the beliefs of the citizens militias and patriot groups about the possibility of a UN takeover of the US. The movie and the theory of the New World Order proposed by the militias are similar, invasion by a foreign force, a big gun grab, arrest of gun owners, military equipment being moved on railroads, enemy helicopters, re-education facilities (concentration camps), and a citizen force that strikes back.

Yeah those Wolverines. I don't know about the New World Order crap. Yeah, I know about all those groups, The Round Table et al. I tend to be big on conspiracy theories but be that as it may what happened was similar to *Red Dawn*. It wasn't Colorado (actually Los Vegas, NM), it was Iowa, Nebraska and Kansas. I later heard it also included Illinois. So, what do these states have in common? They're the breadbasket of the world. Look up agricultural outputs of the four states and you can see why someone would load a bunch of Chinese troops aboard cargo planes and haul them from somewhere in México to the Midwest.

Only the pathfinders arrived by parachute. Their sole purpose was to secure airports adequate to land the transports. Where, one might ask, were our Air Forces? Heavily engaged with scores of foreign fighter aircraft. We might have been winning the air war, BUT, most of the transports were getting through. And, where was our military and National Guard? On the border and west coast. Even the Interstate highways that Eisenhower had built for this very purpose presented no immediate solution because it's a long way from California, Oregon, Washington, Arizona, New Mexico and Texas to the Midwest. We don't have any pathfinders or aircraft in Cambridge but they're fairly close. Ames Municipal Airport, identifier AMW, isn't a huge airport but it does have a 5,700' runway.

The Xian Y-7 is a Chinese copy of Antonov An-24 which is similar to the US C-123 or the DCH-4. Twin engine turboprop. The Chinese were only supposed to have a few but maybe Russia sold them some An-24s. That lingering question may never be answered. But, that's not the point. The point was we had 'a few' aircraft loads of troops right in the middle of Iowa, about 20 miles to the north. Another point not generally con-

sidered was that Sino-Defense reported much larger numbers of Chinese transport and tanker aircraft.

I left the gate open for David and Melody. While we waited for them to show up we moved the things from the house to the shelter, one more time. We have it down pat by now, but the stuff keeps getting heavier...or something. And, I hadn't had the time to make the trip down to Bethany so it was Marlboros or go without. Ask me if I care. The people in Iowa aren't all that much different from most of the people in the country. Invade us at your risk.

"Sorry it took so long Jason. We had to come down the long way. Is the invitation still open?"

"She said yes didn't she? What's in the trailer?"

"We have a few preps now. Mostly stuff I could buy locally and store in five gallon food pails. Magic marker says what's in the pails. You know I got the rifle because Melody told me you asked. (She volunteered) I got stuck doing a prisoner transfer to Missouri and while I was there, I picked up some smokes. Got you a carton of Kool's and a replacement carton of Marlboros. Couldn't get much ammo, someone was there before me and bought 6 cases of the Radway. I got a little and some of the other stuff. Hang on while I get..."

"Slow down before you have heart attack David. They're in Ames, not Cambridge. Probably a bunch of students from ISU out there with posters protesting the invasion."

"How did you know about that?"

"That's what kids do. I read once on Frugal's that they didn't even know how to plant a garden. Someone suggested putting the instructions on MTV."

"Can you grab the gun cases?"

"Yeah. Let me get a cart to move the stuff or you can just pull the trailer around behind the garage. Probably a good idea, it will be out of sight."

"The house is locked down Jason."

"Thanks Kristin. We'll get their stuff in the shelter and take care of the livestock."

"Are you going to block those doors again?"

"I don't think so David; it's an invasion, not a nuclear war or Yellowstone."

"That's the last of it. Do you have anything cold to drink?"

“Got a Colorado Kool-aid.”

“It’s awful early.”

“It’s never too early for a cold beer. But there’re Cokes and Squirt in the fridge. Or bottled water if you’d prefer.”

“I’ve been thinking about some of the things you have in your armory. It may be illegal, but it could come in handy. It’s just a shame you don’t have a suppressor for the Tac-50.”

“It’s true that I didn’t get an Elite Iron suppressor.”

“I detect a but.”

“But, I got a Jet suppressor. Cost about \$2,350 including shipping. Made out of titanium. It’s a big sucker, 2³/₈” in diameter, 14¹/₄” long. Just got that recently.”

“You can’t buy suppressors in Iowa!”

“I guess the guy that sold it to me didn’t know that. He got the tax stamp and it’s in his name so I don’t really care.”

“Another violation, a strawman purchase.”

“No siree Bob. Solid fat and muscle.”

“You’re impossible. If the NRA knew about you, they’d cancel your membership.”

“How many Endowment members have they thrown out?”

“You spent the money?”

“Well, it’s only money and it’s worth less every day. I don’t plan on running for the Board of Directors. That’s everyone and everything. Time to lock it down.”

“But then you won’t know what’s going on outside.”

“Oh ye of little faith. Figured we missed the nuclear war and bought a camera. Had it installed on my radio tower underneath one of the standoffs. We have a 370° field of view. I know there’s only 360° in a circle so it sort of overlaps.”